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Fig. 97a, FLAT. Rounded Corners.

Fig. 86, CHELTENHAM. Rounded Corners. Patent Stoppers.

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Fig. 98, OVAL

Fig. 202, OVAL, Flat one Side.

Fig. 203, FLAT. Round Ends.

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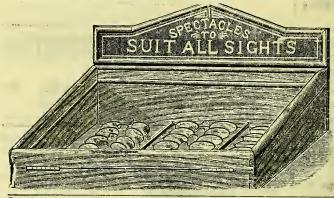
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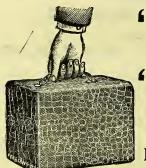
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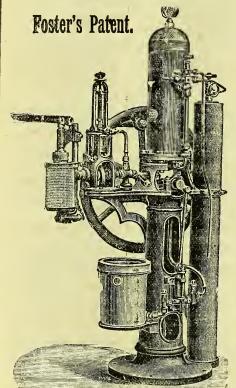
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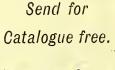
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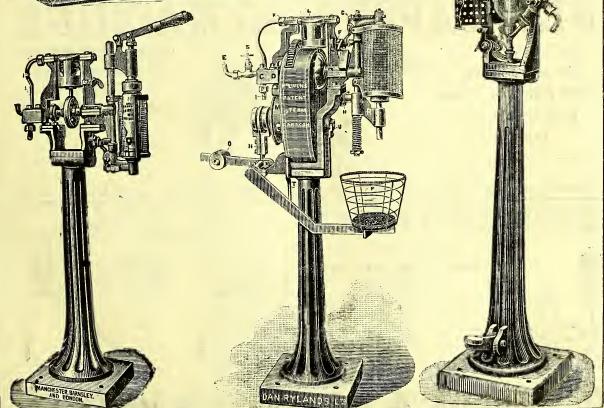
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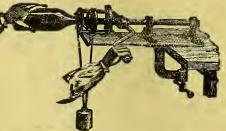
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JUNIOR; aged 20; 4 years' London experience; good references, 104/34, Office of THE CHEMIST AND DRUGGEST, 42 Cannou Street, E.C.

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JUNIOR, in Dispensing business; aged 19; abstainer; good reference; Sheffield or Manehester district preferred, W., 91 Sydney Road,

MANAGER; qualified; married; iudoors; view to purchase, if suitable; Loudou or subnrbs. A. P. S., Seagrieff's Library, Crouch

A DVERTISER is open to represent in South Lameashire a good Firm.
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DISPENSER to Surgeon, or Assistant to Chemist, seeks situation: unqualified; 28; abstainer. "Drugs," 5 Birch Street, West Gorton,

QUALIFIED Manager; married; aged 42; varied experience; town or country. 101/36, Office of The Chemist and Druggist, 42 Cannon Street, E.C.

J UNIOR or Improver, aged 19, in good Dispensing business; indoors preferred; 2½ years' experience; disengaged. Peck, Trumpington Street, Cambridge.

DISPENSER to Surgeon; aged 26; London experience; West-end preferred; outdoors; permanency desired; reference. Thompson, 328 Uxbridge Road, W.

ASSISTANT (20), in Dispensing business; outdoors preferred; 4 years' good experience; reference. H. Campbell, Limber Grange, Brocklesby, Lineolnshire.

EXPERIENCED Manager (Branch) or Senior (50); qualified; trustworthy; married; moderate terms accepted; Prescriber, Extractor. 26 Fairfield Street, Wrexham.

WHOLESALE.—A gentleman, 9 years' experieuec iu Wholesale (3 years' warehouse, 6 years' office), desires re-engagement. T. W. G., 44 The Grove, Camberwell, S.E.

As Manager for Branch, iu or near Loudon, where good stock is kept; disengaged March 1. M. P. S., c/o Leigh, Chemist, 82 Beaconsfield Road, Preston Park, Brighton.

DISPENSER or Assistant to Surgeon; whole or part time; experienced; well recommended. 79/23, Office of The Chemist and Druggist, 42 Cannon Street, E.C.

UNIOR (21); 7 years' good-class Dispensing and general experience; abstaiuer; London preferrel. 104/33, Office of The Chemist and Druggist, 42 Cannou Street, E.C.

ANAGER or Senior in good-class business; town and provincial experience; Hall qualification; aged 30; disengaged March 6. Hughes, 77 Church Street, Preston.

MANAGER or Assistant; qualified; 8 years' experience; Dispenser, Preseriber, Extractor; aged 24; experienced in management. "Chemicus," 26 Tyson Street, Bradford.

PERMANENCY, as Manager or Senior; aged 30; height 5 ft. 10 in.; married; no childreu; Miuor; varied experieuce; good references. "Chewist," 40 Sheep Street, Stratford-ou-Avon.

STORES, or large Mixed business; outdoors; 2 friends; 22 and 24; together preferred; first-class references. Chemist and Druggist, 42 Caunon Street, E.C.

OUTDOORS; short hours or part time; good Dispeuser, Connterman, Extractor, Photography; aged 30; unqualified; 5 ft. 7 in.; steady; abstainer. Francis, 28 Montpelier Vale, Blackheath.

WHOLESALE.—An experienced Clerk, discugaged end February, desires re-engagement; 6 years present situation; latterly head nvoice Clerk. "Clerk," 59 Sautos Road, Waudsworth, S.W.

DISENGAGED, qualified, experienced; aged 45; married; seeks engagement as Mauager or Assistant; excellent testinouials. Address, "Chemicus," 17 Eekstein Road, Clapham Junction, S.W.

SOUTH OF FRANCE.—At once, qualified Junior in good Dispensing business. Apply by letter, stating full particulars, J. P., c/o H. Gilbertson & Sons, Il St. Andrew's Street, Holborn Circus, E.C.

PORTSMOUTH or Southsea.—Situation wanted; outdoors; Minor: aged 30; London and Provincial experience; highest references. 101/38, Office of THE CHEMIST AND DRUGGIST, 42(Caunon Street, E.C.

F. J. BRETT, VALUER, LEICESTER,

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References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

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SIGGETAKING UNNECESSARY. — Stocktaking is always dreaded by Chemists, and with a competent Valuer is not necessary.

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STOCKS AND FIXTURES BOUGHT FOR CASH. YORKS.—Returns £700: net profit, £250; valuation, £500 to £600; part can remain. SUFFOLK.—Returns £870; good-class Retail, with excellent Proprietaries; price £750. SCARBOROUGH.—Returns £350; can be doubled by personal attention: price £200, or valuation. SUSSEX.—Dispensing and Light Retail; returns £500 to £600; price £400; rent £30. STAFFS.—Returns £500; Retail, Prescribing, and Dispensing; unopaged; price £400 or valuation.

posed; price £400, or valuation.

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VALUATIONS and TRANSFERS conducted in any part of the United Kingdom. Over 20 years' practical experience.

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- requiring an investment of £500 to £3,000 cash.

 1.—KENT.—Occupying a capital position in a good market town, very old-established Light Retail, Dispensing, and Prescribing Business; no heavy trade; large handsome premises, well fitted, and heavily stocked; convenient and roomy house, with large garden; returns over £2,000; net profit over £600; price about £1,800; personally inspected.

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- 3. YORKSHIRE.—A good-class Family, Retail, Dispensing, and Prescribing Business; changed hands once in 50 years: returns £800; has done £1,400; large double-fronted shop, convenient 10-roomed house; low rent on lease; selling through illness; price £650, or valuation of stock and fixtures: personally inspected.
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- 5.—LINCOLNSHIRE. Market town; Retail, Dispensing, and Prescribing Business; returns £1,100, with good profits; low rent; convenient house; price £750; valuation; terms can be arranged.
- 6.—WEST OF ENGLAND.—Old established Retail, Dispensing, and Prescribing Business; returns £850; double-fronted shop, well fitted and heavily stocked; large house, with good garden; price £650, or offer.
- 7.—GLOUCESTERSHIRE.—Market town; Retail, Dispensing, and Prescribing, Business, returning nearly £550; good prices; rent low; good 9-roomed house; modern shop, well fitted and stocked; price £375.
- 8.—LONDON, N.—In a rapidly increasing good-class suburb; returns £1,100; low rent; good house; large garden; 21 years' lease; stock and fixtures worth £850; price £950; month's trial behind counter.

Messrs. Berdoe & Co., 30 Jewry Street, Aldgate, E.C.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

CASH Retail and Prescribing Business for disposal in Kent; rent, inclusive, £20; will bear strict investigation. For particulars, apply to Z., c/o "Chemist," South Ashford.

A CHEMIST'S and Druggist's Business, in the best situation of New-castle-on-Tyne, with immediate possession; fixtures at a valuation; stock optional; gentleman retiring from the business. Apply, W. T. Allen, 14 Apply, Norwenthe on Theorems. 14 Arcade, Newcastle-on-Tyne.

SOUTH Coast.—Retail and Prescribing Business, in a populous neighbourhood; satisfactory reason for disposal; price £150. Apply, G. M. Cluc, 212 Fratton Road, Portsmouth.

WEST of England; large towu; centre of City; old-established readymoney Business; returns about £950; satisfactory reasons for disposal; price moderate. Apply to Stone, King & Co., 13 Queeu Square,

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Having numerous inquiries for good-class Country Businesses, they invite communications from intending vendors. NO CHARGE IS MADE UNLESS A SALE IS EFFECTED, and particulars of businesses are given to those only having the required amount of capital to invest, thus guaranteeing only bona fide inquiries and obviating publicity. VALUATIONS MADE FOR PROBATE OR TRANS-FER, BOOKS AUDITED AND BALANCE-SHEETS PREPARED IN ANY PART OF THE UNITED KINGDOM. After many years' practical experience in the Wholesale and Retail Drug Trade, C. & Co. can offer valuable assistance and advice in the conduct of business of a confidential nature. References permitted to past and present Clients, also to the Leading Wholesale Houses in the Trade.

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LONDON, N.—Good-class Dispensing and Retail; handsomely-fitted Pharmacy, with good house and garden; returns £1,100; price £950.

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YORKSHIRE.—Old-established Retail Business, with Gilbey's Agency; returns over £1,600; price £500 or valuation.

NO CHARGE TO PURCHASERS.

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THOMAS TOMLINSON & SON, Chemists' Valuers, of New Cannon Street, Manchester, have businesses for disposal in Manchester suburb, price £150, profits £120; Manchester, price £300, profits £300; Manchester (outskirt), price £150, profits £120 (a splendid little pharmacy): Padiliam, price £550, profits £280; Padiliam, price £200, profits £100; Derby, price £200, profits £120; Stockport, price £135, profits £100; Claytou-le-Moors, price £120, profits £160; Boltou, price £420, profits £300; Middleton, price £300, profits £250; Badford, price £380, profits £250; Fishefield, price £300, profits £250; Ripon, price £500, profits £250; Farsley, price £220, profits £100; Birkdale, price £280, profits £200; Woston Ferry, price £200, profits £133; and several others private. No charge to ingoers. Say price of business required, and we have little doubt but we can supply.

BUSINESSES FOR DISPOSAL—Cont.

KENT.—Unopposed Light Retail and Dispensing Business; returns about £500; net profit £200; 9-roomed house; large garden, stocked with fruit trees; price £300, or valuation; fullest investigation courted. "Invicta," office of The Chemist and Druggist, 42 Cannon Street, E.C.

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SPLENDID opportunity for young man starting business; a Country Light Retail and Dispensing Business; returns \$460; good profits; low rent, nearly covered by Agency; ill-health cause of selling; valuation of stock and fixtures about £300. W. M., c/o Messrs, Hodgkinson, Treacher & Clarke, 101 Whitecross Street.

NEGLECTED Brauch.—To be sold at valuation; suit pushing man who could combine Dentistry; shop well fitted and stocked; good house (9 rooms), private entrance; rent £60; main road; busy poor-class neighbourhood, London, S.E. Apply, "Vita, "Office of The CHEMIST AND DRUGGIST, 42 Cannon Street E.C.

DISTRICT.—A Retail and Prescribing Business, in middle-class populous neighbourhood; in same hands 40 years; vendor now retiring from business; pleuty of scope for energetic man; good house and garden; moderate reutal. A. C. K., Baiss Bros. & Co., 4 Jewry Street, Aldgate, E.C.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

OCUM or Assistant. J. Harris, Cheapside, Newent.

LOCUM or Assistant (29); qualified. H., 245 Lewisham High Road, S.E.

JUNIOR (21); 5 ft. 10 in.; good experience. F., 39 Rawling Street, Keighley.

Assistant (London); aged 25; unqualified; Extractor. 156 High Road, Lee.

JUNIOR (20); 5 years' experience; passed prelim. H. M., 2 Loyal Terrace, Taunton.

A SSISTANT (25), Minor; 8 years' experience; ontdoors. 11a Penny Street, Lancaster.

TEMPORARY Manager or Senior; qualified. "Loenm," 124 High Street, Tewkesbury.

PART-TIME Assistant or Dispenser; London. B., 5 Liverpool Road, Newcastle, Staffordshire,

SEVEN years' experience; accurate Dispenser; good writer. E.S., 8 Square, Chesham, Bueks.

AS Counterman (outdoors); good address and references; aged 27. Crick, 46 Dyke Road, Brighton.

AS Junior in good house of business (indoors); aged 18; height 5 ft. 8 in. Son, Edwards, Ohemist, Redruth.

A SSISTANT (24); 81 years' good experience; good reference. A. S., 3 St. James's Street, King's Lynn.

AS Assistant, Dispenser, or Manager, by qualified Chemist; aged 40. S. Hassall, 205 Lever Street, Bolton.

A SSISTANT or Manager; 30; qualified; outdoors preferred. "Minor," 9 Russell Street, Stockton-on-Tees.

A SSISTANT (27); ontdoors; Minor; London preferred. Seyon, 17
- Priory Terrace, Caversham, Reading.

JUNIOR (22); good experience; 5 ft. 10 in.; first-class references. Hogg, 3 Green Bank, Ulverston, Lancs.

UNIOR (21); good reference; time for study and outdoors preferred. E. G., 43 Lynette Avenue, Clapham, S.W.

UNIOR (20); 5 years' experience; disengaged; good reference. Thomas; Garregwen, Tanygwes, Cardigan.

WANTED, Laboratory or Wet Counter; good references; aged 23. W., 7 Summerfield Road, Upper Holloway.

MANAGER or Assistant; outdoors; experienced; disengaged. "Major," 9 St. Catherine Terrace, Lincoln.

WHOLESALE; Wet or Dry Counter; aged 22; 6 years' experience. "Salol," Bloomfield Road, Kingston-on-Thames.

LIGHT Employment wanted by Chemist and Druggist (registered), aged 60. T. Wyatt, 2 Somerset Place, Gloucester.

A SSISTANT (outdoors); 14 years' good experience; North preferred. "Chemicus," 9 Brunswick Terrace, Scarborough.

A SSISTANT or Dispenser; experienced; England or France; disengaged. "Alpha," 147 Kennington Park Road.

JUNIOR (23); 7½ years' experience; abstainer; extractor; height 5 ft. 9½ in.; good references. A. R. C., Silloth, Carlisle.

A SSISTANT or Dispenser to Surgeon; aged 30; tall; country preferred; outdoors. "Alpha," 23 Broadgate, Coventry.

ANAGER, Assistant, or Looum-Tenens; experienced and qualified; aged 37; single. H., 20 Saltoun Road, Brixton, S.W.

BRANCH Manager (27); qualified; experienced; references, "Chemist," Station Road, Church End, Finchley, N.

JUNIOR (19); 4 years' experience; disengaged March; in or near London. Bygott, c/o Lasham, Chemist, Romford, Essex.

DISPENSER to Surgeon; London experience; London preferred; aged 25; disengaged. "Statim," 59 London Road, Gloucester.

LOCUM-TENENS or Branch Manager; Family or Mixed business; registered; disengaged. S., 24 North Sherwood Street, Nottingham.

LOCUM, or Branch Manager; registered; South Coast preferred, 103/40, Office of THE CHEMIST AND DRINGGER, 42 Cannon Street, E.C.

RAVELLER, Bristol and West, requires re-engagement on same ground or Northern Counties., Watson, 45 Brynland Avenue, Bristol.

JUNIOR; aged 20; 4 years' London experience; good references. 104/34, Office of The Chemist and Druggest, 42 Camion Street, E.C.

BRANCH Manager, with or without view to succession: 12 years' experience; Minor. "Radix," 22 Palace Street, Buckingham Gato, S. W.

JUNIOR, in Dispensing business; aged 19; abstainer; good reference; Sheffield or Manchester district preferred. W., 91 Sydney Road, Sheffield.

ANAGER; qualified; married; indoors; view to parchase, if suitable; London or suburbs. A. P. S., Scagriell's Library, Cronch End, N.

A DVERTISER is open to represent in South Laneashive, a good Firm. Apply, 105/7, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

DISPENSER to Surgeon, or Assistant to Chemist, seeks situation; unqualified; 28; abstainer. "Drugs," 5 Birch Street, West Gorton, Manchester.

QUALIFIED Manager; married; aged 42; varied experience; town or country. 101/36, Office of THE CHRWIST AND DRUGGIST, 42

JUNIOR or Improver, aged 19, in good Dispensing business; indoors preferred; 2½ years' experience; disengaged. Peck, Trampington Street, Cambridge.

DISPENSER to Surgeon; aged 26; London experience; West-end preferred; outdoors; permanency desired; reference. Thumpson, 328 Unbridge Road, W.

A SSISTANT (20), in Dispensing business; outdoors preferred: 4 years' good experience; reference. H. Campbell, Limber Grange, Brocklesby, Lincolushire.

EXPERIENCED Manager (Branch) or Senior (50); qualified; trustworthy; married; moderate terms accepted; Prescriber, Extractor. 26 Fairfield Street, Wrexham.

WHOLESALE.—A gentleman, 9 years' experience in Wholesale (3 years' warchouse, 6 years' office), desires re-engagement. T. W. G., 44 The Grove, Camberwell, S.E.

As Manager for Branch, in or near London, where good stock is kept; disengaged March 1. M. P. S., c/o Leigh, Chemist, 82 Benconsfield Road, Preston Park, Brighton.

DISPENSER or Assistant to Surgeon; whole or part time; experienced; well recommended. 79/23, Office of The Ohemist and Druggist, 42 Cannon Street, E.C.

JUNIOR (21); 7 years' good-class Dispensing and general experience; abstainer; London preferred. 104/33, Office of The Chemistr and Druggist, 42 Cannon Street, E.C.

MANAGER or Senior in good-class business; town and provincial experience; Hall qualification; aged 30; disengaged March 6. Hughes, 77 Church Street, Preston.

ANAGER or Assistant; qualified; 8 years' experience; Dispenser, Prescriber, Extractor; aged 24; experienced in management. "Chemieus," 26 Tyson Street, Bradford.

PERMANENCY, as Manager or Senior; aged 30; height 5 ft. 10 in.; murried; no children; Minor; varied experience; good references. "Chemist," 40 Sheep Street, Stratford on Avon.

STORES, or large Mixed business; outdoors; 2 friends; 22 and 24; together preferred; first-class references.

CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

Outdoors; short hours or part time; good Dispenser, Counterman, Extractor, Photography; aged 30; unqualified; 5 ft. 7 in.; steady; abstainer. Francis, 28 Montpelier Vale, Blackheadh.

WHOLESALE.—An experienced Clerk, disengaged end February, desires re-engagement; 6 years present situation; latterly head nvoice Clerk, "Clerk," 59 Santos Road, Wandsworth, S.W.

DISENGAGED, qualified, experienced; agad 45; married; seeks engagement as Manager or Assistant; excellent testimonials. Address, "Chemiens," 17 Eckstein Road, Clapland Junction, S.W.

SOUTH OF FRANCE.—At once, qualified Junior in good Dispensing business. Apply by letter, stating full particulars, J. P., c/o H. Gilbertson & Sons, 11 St. Andrew's Street, Holporu Circus, E.C.

PORTSMOUTH or Southsea.—Situation wanted; outdoors; Minor; aged 30; London and Provincial experience; highest references. 101/38, Office of The Chemsy and Daugetst, 42 Cannon Street, E.C.

BUSINESSES FOR DISPOSAL-Cont.

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DRUG and Druggists' Sundries Stores; splendid position; main thoroughfare; crowded neighbourhood; well fitted, fully stocked; rent only £40; incoming very low; all at, or otherwise THE CHEMIST AND DRUGGIST, 42 Caumon Street, E.C.

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An old-established Retail and Prescribing Business, with valuable Proprietaries stocked by the Trade: large house, shop, and garden; lease; low rent; returns average over £400, at good profits; could be much increased; good opening for Dentistry; price £250; part can remain. Apply, O. C. Kent, Esq., 103 Cheapside.

£4,000.—Warwickshire.—Old-established Retail Drug Business, with Mineral Water trade attached; returns £4,000; purchaser would require about £2,200 to take it over; owner retiring; cash buyers only entertained; references exchanged. "Capsicum," Office of The Chemist and Druggist, 42 Cannon Street, E.C.

WHOLESALE Drng Business, in the City, for immediate sale, snitable for amalgamation with a similar concern, as present premises need not be taken over; returns £3,000 under very inadequate management; price required, simply value of stock, &c., about £750. "Wholesale," Office of The Chemist and Druggist, 42 Cannon Street, E.C.

FOR SALE; a first-class Cash Retail and Dispensing Business in an important town within easy distance of London; returns about £1,600 under management; could be greatly increased by active supervision; large premises, part let off; net rent between £80 and £90; partnership would be entertained; no agents. For further particulars, apply to Messrs. Harlow & Co., 5 Bishopsgate Street Withiu, London, E.C.

A N exceptional opportunity; a neglected Business in Bayswater, well and prettily fitted, in a capital situation; a good Dispensing and General business to be done: 7 years' lease, 6 mexpired: rent £65; half until recently let off; present owner, not living in London and otherwise engaged, is incapable of giving personal attention; price, to immediate purchaser, £60; personal applications (by appointment) only entertained, when every facility for investigation will be given. Please advise appointment, to D. F., 150 Minories, E.C.

BUSINESSES WANTED.

38. 6d. for fifty words; 6d. for every 10 words beyond

WANTED, a genuine Business in London; doing about £500, and capable of increase. Full particulars to H. G., 160 Stockwell Road, S.W.

WANTED, immediately, a reliable Retail and Dispensing Business in healthy country town: returning upwards of £800 a year; advertiser has just parted with a London business, and is prepared to deal liberally to secure a good concern in nice town. "Moschus," c/o Messrs, Meggeson & Co., 14 Miles Lanc, E.C.

WANTED, Light Retail, Dispensing, and Prescribing Business, in good country town or large village; no objection to mixed or neglected business if scope for improvement; returning £500 to £700; Midlands or South-west, and with a garden preferred. "Cash," Office of The Chemist and Druggist, 42 Cannon Street, E.O.

WANTED, a reliable Chemist's Business, returning £500 to £700 (profitable); cash down for a suitable concern, suburban or good country town; modern Pharmacy; good house, private door; trial or introduction desired; particulars in confidence. Address, "Bona Fide," Office of The Chemist and Druggist, 42 Cannon Street, E.C.

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3s. 6d. for fifty words; 6d. for every 10 words beyond.

LONDON & INDIA DOCKS JOINT COMMITTEE.

FOR sale, about 500 cumpty Kegs, in which iodine was imported; can be inspected at No. 2 Warchouse, London Dock. Tenders to be addressed to the Secretary, London and India Docks Joint Committee, 109 Leadenhall Street, London, E.C.

Dock House, HENRY J. MORGAN, Secretary.

109 Leadenball Street, London, E.C. February 7, 1893.

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A PPRENTICE.—Wibmer & Wardley, Chemists, Tonbridge, have a vacancy for a well educated youth as Apprentice; moderate premium required; references exchanged.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

JUNIOR Assistant, accustomed to Country Retail. State full particulars as to salary, &c. (enclosing photo), to R. Walker, Chemist, Royston.

A SSISTANT, from 24 to 26 years of age. Applicants please state qualification and salary required to Burritt & Dix, 81 High Street, Croydon.

MMEDIATELY, good Junior for Light Retail; Tooth Extractor preferred. References and full particulars to Ashfield, 161 King's Road Reading.

THE PROSSER ROBERTS CO., Chemists, 323 Walworth Road, S.E., have a vacancy for a Part-time Assistant; would sait Student preparing for exam.

JUNIOR (indoors); good references; personal application preferred. If by letter, state age, salary required, and references to Bunker, 135 Great Dover Street, S.F.

A SSISTANT required, for General Retail and local Wholesale trade.

Apply, with full particulars of last situation and references, to

H. Clarke, Chemist, Whitelaven.

WANTED, a qualified Assistant (indoors), to fill a responsible position; inust be a good Couliterman; enclose photo, to be returned. Apply to J. Burton, Chemist, Llandulno.

WANTED, qualified gentleman, to manage small Retail and Prescribing business for Widow; indoors. Apply, stating full particulars, M., 92 Hopwood Lane, Hidifax.

J. THOMAS, Chemist, Bath, requires a competent indoor Assistant; good Dispensing and Retail; about 25; comfortable home; scul age, height, salary, and references

TRAVELLERS wantel, for town and country, to sell disinfectants; unst have good connection. Address, with full particulars, Wandsworth Chemical Works (Limited), Wandsworth.

UNIOR Assistant (indpors); must be accustomed to good-class Dispensing business. State full particulars and enclose photo to J. Phillips and Son, Pharmaceutical Chemists, Newport, Mon.

AT once (S.E. district), Dispenser to a medical man; duties light; hours 9 till 12,6 till 9, except Sumbrys; £1 per week. H. J. T., Office of The Chemist and Druggist, 42 Cannon Street, E.C.

WANTED, a qualified Dispenser (able to make Tinetures, &c.); unist be first-class bookkeeper, active, and energetic; a total abstainer preferred. Apply, with reference to late principals, stating salary (ontdoors), and enclosing photo, to "Doctor," Office of The Chemist and Dauggist, 42 Cannon Street, E.C. It is useless to apply without photo and testimonials.

SITUATIONS OPEN-Cont.

CILES, SCHACHT & CO., Olifton, will shortly require a qualified Dispenser; indoors. Please state full particulars of experience, and the salary required.

WANTED, qualified Assistant, experienced in good-class business; apartments and board provided. Apply, with usual particulars, to Mr. J. Bain, Martin & Co., 4 Quadrant, Lime Street, Liverpool.

QUALIFIED Assistant wanted, at once; one about 30 years of age and used to Store trade preferred; good salary to capable man. Apply, stating salary, to G. C. Dasart, 10 Robertson Street, Hustings.

ASSISTANT (qualified), in good-class Retail and Family business; imbours; must be well recommended; state age, salary, &c., and enclose photo, if convenient. Apply, C. J. Elkington, High Street, Rugby.

WANTED, an energetic, reliable Traveller for London, having good eonnections amongst Exporters, Stores, Chemists, Oilmen, &c. Address, H. W., Office of The Chemist and Druggist, 42 Cannon Street FO.

ASSISTANT; unqualified; mixed trade; outdoors; no Sanday work; close at 5 Thursdays; 3 hours in the morning for study if required; state age, height, experience, and salary required. Heald, Burnham, Rucks

DISPENSER (outdoors) wanted, for part-time, morning and evening, at a Surgeon's Dispensary in West London; very little Retail. Apply, by letter only, giving full particulars, to "Medicus," 48 Portsdown Road, W.

WANTED, by March 1, a Schior Assistant (indoors); aged about 30; one with good all-round experience and accustomed to modern system of trading preferred. Apply to Reece & Co., 53 Great Marylebone Street, London, W.

A N Assistant, about 22 years; indoors; must have good Dispensing experience. Apply, with usual particulars and photo, to E. Pettinger, 30 Rosslyn Hill, Hampstead, N.W. Vacancy for a well-educated youth as Apprentice.

ABORATORY Assistant required in a Provincial Wholesale; must have experience in making Pharmaceutical preparations, and capable of managing a small Steam Laboratory. Apply, W. V., e/o Horner & Sons, Mitro Square, Aldgate, E.C.

WANTED, Junior Assistant, about 20, or Improver for Oil and Colonr Counter (Retail). Apply, stating age, height, salary required (outdoors), with full particulus of experience and reference, to N. Palmer & Co.'s Stores, Stokes' Croft, Bristol.

JUNIOR (outdoors), for counter and stock, in quick Light Retail and Dispensing; one just completed apprenticeship would suit; abstainer; send usual particulars, with photo (to be returned); close Wednesdays at 3. John Cross & Co., Chemists, Reading.

WANTED, immediately, an Assistant accustomed to a good Country business; Minor; comfortable home and practically no Sunday work. Apply, stating age, height, salary required, enclose carte, references, W. Baxter, High Street, Southampton.

WANTED, a Gentleman, having a good connection amongst Agricultural Chemists in the South and West of England, to represent an old-established firm of Manufacturing Chemists. 234/22, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, by March 15, a competent Assistant, not nuder 25; must be accustomed to good-class Retail and Dispensing; indoors; ubstainer preferred. Apply, giving references and full particulars (photo if convenient), to J. Winter, Chemist, Llandadno.

BRIGHTON.—Junior Assistant: thoroughly steady; accustomed to good-class Dispensing business; about 22; abstainer; 2 being kept, time for study might be arranged. Address, with usual particulars, enclosing photo, to Mr. Vizer, 154 Marine Parade, Brighton.

WANTED, Chemist's Assistant to proceed to Natal; 3 years' agreement; aged under 22; must not be afraid of hard work, as business includes feed drinks. Full particulars of experience required. Doughas, c/o H. B. Sleeman, 84 Leadenhall Street, London, E.C.

WANTED, capable, willing Pharmacist (qualified preferred) of genthmanly manners and address, to wait at counter upon doctors and to attend to trade orders; references required. Apply by letter, stating age, salary, und experience, to W., e/o Mr. Thomas Dixon, 16 Great Marborough

CHEMIST wanted, for India: Junior Assistant with Minor qualification; must have excellent references from first-class houses: 4 years agreement; passage out paid. Apply, with full particulars, and enclosing photo, to "India," c/o Deacon's Advertising Offices, 154 Leadenhall Street, E.O.

ASSISTANT (21-25), indoors; one who can Extract Teeth preferred; middle-class Light Retail; good references indispensable. State age, height, experience, salary required, and send photo (to be returned), by letter only in first place, Matthews & Son, Chemist, Post-office, Cambridge Road, Mile End, N.E.

CHEMIST, Druggist.—Junior wanted for Branch (indoors). County Drug Stores, Leanington.

DISPENSER and Bookkeeper wanted; state terms and references, Drs. Tomson & Sworder, Park Street West, Laton.

INOR, aged about 25, is required to fill a situation in a good-class business abroad. Apply, with full particulars, to "Abroad," Offi 3 of The Chemist and Druggist, 42 Cannon Street, E.C.

A SSISTANT wanted, immediately, by country Manufacturers of Soluble Essences; must have experience. Address, "Concentrated," Office of The Chemist and Dauggist, 42 Cannon Street, E.C.

UNIOR Clerk wanted by a firm of Wholesale Dringgists; 'a knowledge of the names of Drugs; good writer and quick at figures indispensable. Apply by letter to "Beta," Office of The Chemist and Druggist, 42 Cannon Street, E.C.

PARIS. — Wanted, Locum-Tenens for two months; knowledge of French essential; good references; salary 50 francs; outdoors; room found. Apply personally, or by letter to L. Fidélia, Westminster College, Trinity Square, Borough.

A SSISTANT, with some town experience, for general routine in Retail, about 23; active, obliging, and industrious; abstainer preferred. Full particulars, with references (and photo, if by letter), W. T., Phillips, 193 Knights Hill, West Norwood, or Tulse Hill Station.

QUALIFIED ontdoor Assistant; not under 25; comfortable permanency; hours 8 to 8; full particulars, giving latest references, stating when disengaged, qualification, and salary required; photo must be sent (to be returned); 2 Assistants kept. Cowan, Chemist, Star Hill, Rochester.

AS Manager, to work up a business that has been neglected, a qualified single man, abstainer preferred, 25 to 35 years of age; Extractor; one accustomed to Dispensing and Prescribing business; salary £52 (induors), with commission; send particulars, with testimonials. Dane, Queen's Road, Erith.

COUNTRY.—A gentlemanly Assistant (outdoors), about 25, well accustomed to first-class Dispensing, and willing to assist other Assistants; no heavy or agricultural trade worth mentioning. Apply, stating salary and two last references, James, c/o Messrs. Barelay, 95 Farringslon Street, London.

to manage a Branch; acconstomed to Prescribing and Dispensing, able to Extract Teeth, &c.; character must bear strictest investigation. Apply, stating age, height, references, salary, with photo, to Augustine Worts, Chemist, Harwich.

WANTED, early in March, a steady and reliable Minor man, of gentlemantly habits; indoors; comfortable home; one desuring permanency preferred. Apply, with planto (to be returned), stating experience, salary, with usual particulars, and oblige B. W., c/o Mr. Millhouse, 26 New Road, Gravesend, Kent.

A T ONCE.—Manager for Branch; indoors; brisk cash business, N.W.; must be qualified, single (preferred), and possessing undeniable references; one seeking permanency; 4 assistants kept. Apply, stating fullest particulars, to L., Messrs. Hodgkinson, 101 Whiteeross Street, E.C. Also vacancy for smart Junior or Improver.

QUALIFIED Assistant, about 25, in first-class Provincial business; must be experienced in Dispensing, and accustomed to the manufacture of all B.P. preparations; a liberal salary (in or out doors) to a thoroughly steady, willing, and trustworthy man. Full particulars to J. D., Messrs. Meggeson, Miles Lane, London, E.C.

WANTED, an experienced Gentleman, holding other agencies, calling upon the largest Wholesale Mannfacturing Chemists and Druggists, to offer Pepsin, in bulk, on behalf of one of the largest American packers. Address, in confidence, giving details of experience and references, to E. F., c/o Lee & Nightingale, Advertising Agents, Liverpool.

WANTED, a young qualified Pharmacist, quick and correct at figures, to take entire charge of the cost-books of an important firm of Manufacturing Chemists; no application will be entertained unless produce forthcoming of exceptional ability and accuracy in calculations; a permanent rising position to one able to meet the requirement of the advertisers. Apply, by letter, stating, age, salary, experience, and other particulars, to A. Y. Q. c. o Thomas Dixou, 16 Great Murlborough Street, W.

DAVIES, Chemist, 101 & 103 Park Lane, Leeds, requires 2 Assistants, one about 25, to manage above luminess, must be a good Preseriber and Dispenser, his services will be required in a fortnight; the other, about 22, for his Headingley establishment, must be a quick and accurate Dispenser, and used to first-class trade, competent to take occusional management, his services will be required in April; comfortable and permanent situations to steady young men with good references; state salary, &c., required, either in or out doors; applications not replied to withdu 3 days may be considered declined.

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SITUATIONS WANTED-Cont.

66 SWAN STREET, Borough, S.E.; 23; disengaged; good references.

JUNIOR (201); 4 years' experience; excellent references. Percy Longley. North Street, Leeds.

JUNIOR; 22; good experience; Loudon. "Delta," 123 Lisson Grove, St. John's Wood, N.W.

DISPENSER or Manager; qualified; experienced; references. M., e/o Lancaster, 235 High Holborn, W.C.

TEMPORARY: town or country; registered: disengaged. Lambert, 18 Perch Street, Shacklewell Green.

JUNIOR: 5 years' experience; excellent references. Trubshaw, Avenue House, Rowley Park, Stafford.

SENIOR; qualified; first-class Dispenser. "Minor," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

JUNIOR or Improver: 20: 5 years' experience: 5 ft. 6 in.; at liberty. "Junior," 14 Oraven Street, Hulme, Manchester.

A SSISTANT; good-class business; outdoors preferred; aged 24.
P. H. Slynn, 81 South Road, Waterloo, Liverpool.

A S Manager; Branch; experienced; London district preferred; married; please state terms. T. H., 5 St. John's Road, Reading.

ASSISTANT (Branch); Dispenser; Hall qualification; 40. "Outdoors," 5 May Villas, Sebastopol Road, Lower Edmonton.

JUNIOR (20); good Dispensing and Counter experience; good references; outdoors preferred. D. W., Warriner Gardens, Battersea.

A SSISTANT seeks engagement; good Retail and Dispensing; 25; excellent references; outdoors preferred. H., 11 Upper Spring

As Manager or otherwise: qualified: over 20 years' good and varied experience; successful as Branch Manager.' Jones, 19 Broad Street,

JUNIOR: outdoors; aged 22; height 5ft. 9 in.; unqualified; moderate salary; good references; town preferred. J. M., 244 Vunxhall Bridge Road.

MANAGER or Dispenser; outdoors; married; good Extractor, Prescriber; varied experience; qualified. "Minor," 4 Medwin Street. Ferndale Road, Brixton.

PERMANENCY; good-class business; thoroughly experienced, town and country; Minor qualification; aged 38. E. F., Lower House, Arddleen, Oswestry.

A DV RTISER, with 7 years' experience and 9 months' as Manager, seeks part-time engagement; satisfactory references. F. R., 224 Roman Road, Bow, E.

MANAGER or Assistant; long experience; qualified; married; Prescriber, Extractor; aged 33. 96/31, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

UNIOR or Improver, with some knowledge of Dentistry; good Dispenser, Extractor, &c.; disengaged; good experience. "Menthol," 97 Manor Road, West Hill, Hastings.

As Manager or otherwise; had considerable experience; excellent references; a good Prescriber; an abstainer. "Reliable," 154 Hollydale Road, Queen's Road, Peekham, London, S.E.

A SSISTANT, 10 years' experience (4 in Paris, 6 in City and West End), wants situation, part-time, or short hours. M. T., Office of The Chemist and Dudggist, 42 Cannon Street, E.C.

COUNTER Adjuncts, Special Preparations; advertiser desires situation to manufacture above; first-class recipes, original ideas. "Speco," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

COMMERCIAL gentleman, with good connection among Chemists in Manchester and Liverpool districts, wants two or three first-class Agencies on Commission. Address, W., 43 Southfield Street, Worcester.

Manufacturing Chemists, Wholesale Druggists, &c.—A gentleman of 18 years' experience as Country Traveller is desirous of re-engagement; aged 38. Apply E. Bush, c/o Weleh, Perrin & Co., Botolph House,

MANAGER or otherwise; qualifying; London district preferred; Extractor; good varied experience and long references; permanency; aged 29; married. "Aliquis," Office of the Chemist and Druggist, 42 Cannon Street, E.C.

A DVERTISER, aged 30, Minor, good London and country experience, wishes to hear of Assistantship with view to subsequent partnership or succession; about £500 at command. "Chemist," 95 Horsbury Street, Bedford.

OCUM-TENENS (36); qualified; abstainer; disengaged. "Minor," 8 Castle StreetEast, W.

SHORTHAND and Typist.—Advertiser, with many years' experience with Wholesale Dring house in the North of England, is open to an engagement. Address, 239/26, Office of The Chemist and Druggist, 42 Cannon Street, E.C.

TRAVELLER.—A M. P. S., with large connection and many years' experience in town and country with high-class Chemists and Perfumers, is open to an engagement. Address, E. C. B., 287 Victoria Park Road, London, N.E.

TRAVELLER.—A Gentleman of varied experience desires position as Traveller (London and suburbs); knows Drug business and allied trades thoroughly; well known amongst London Chemists. Manu, 65 Farleigh Road, Stoke Newington, N.

MANAGER (Branch); single; aged 52; height 5 ft. 9 in.; P. C. by exam.; in a brisk concern, capable of increase; good Prescriber; disengaged March 9th; good references; permanency; town or country. G. J., 46 Cardigan Road, N. Bow, E.

AS Manager, or position of trust, Wholesale or Retail (Major and Apothecaries' Hall qualifications); well up in modern Pharmacy, Analytical Chemistry, and Photography; nged 36; married. "Chemist," 18 Brighton Road, The Avenue, Southampton.

SURGICAL DRESSINGS.—Situation by a young man (24), with exceptional ability and upwards of 8 years, sound practical experience with leading firm; well up in every department on large or small scale; abstainer. Apply to "Thymol," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MISCELLANEOUS.

FOR SALE.—A splendid sample of six Winchester quarts, 5 lbs. cach, Mitcham Oil of Lavender, 1887; also an original bottle, 3½ oxs. Virgin Otto de Rose. Haywood, Plongh Road, Rotherhithe, S.E.

STOCK of drugs, shop rounds, small lot of sundries, range of drawers, mirrors, counter, show cases, shelving; would do for a beginner; cheap or separate; suitable for a dispensing business. 105/29, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A FIRM OF WHOLESALE DRUGGISTS,

ONG-ESTABLISHED in one of the Colonies, with a London office and warehouse, would, under certain conditions, assist qualified Chemists who have some means to start business in the Colony. Application may be made, by letter, to "Colonial," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A PHARMACEUTICAL Chemist whose principal business is during the visitors' season, wishes to meet with something to fill up time during other part of the year; would represent a wholesale firm in Eastern Counties, or undertake the manufacture and distribution of proprietary articles. Adddress, in first instance, "East Coast," Office of Time CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

THE BOTANICAL STUDENT'S SET OF MICROSCOPIC SLIDES,

Illustrating the more important features in Elementary Structural Botany. 14 preparations in portfolio case, 12s. Post free from EDWIN TERRY, F.R.M.S., 41 Nightingale Lane, Balham, S.W.

Dr. WHELPLEY, F.R.M.S., Professor of Microscopy at the St. Louis College of Pharmacy, U.S.A., says:—"It is the finest collection of mounts illustrating Vegetable Histology that we have ever examined." See also review in Tuk CHEMIST AND DRUGGIST, July 2, 1893.

PRELIMINARY AND MINOR,

STUDENTS! Write to-day for a "Guide to Examination," gratis and post free, giving the best advice and how to prepare. Knotty Points in Latin Grammar, 1s. 6d.; Cæsar Simplified, 1s.; Metric System Simplified, 1s.; How to Write an Essay, 3d.; Equations Simplified, 1s.; Student's Herbarium, 100 specimens, 7s. 6d., post free. Mr. J. Tully (Hills Prizeman) Chemist Hastings man), Chemist, Hastings.

LONDON AND LANCASHIRE FIRE INSURANCE COMPANY.

Head Offices 45 DALE STREET, LIVERPOOL. 74 KING WILLIAM STREET, LONDON.

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£801,000. Annual Income Funds in Hand £1,026,000.

Premiums Moderate. Losses settled with promptitude and liberality.

Applications for Agencies specially invited from Chemists and Druggists in both Town and Country Districts.

MEADOWCROFTS'

CONCENTRATED SOLUBLE FRUIT

ESSIENCES

ARE NOTED

For the Excellent Flavour and Aroma they impart to the beverages prepared with them.

SPECIALITIES.

Sol. Ess. Lemon, double the usual strength.

- ,, ,, Ginger Ale, double the usual strength
- ", " Jamaica Ginger, of great strength.
- " " Orange, of great strength.
- " " Hop Ale, double strength.

Foamine, double strength.

STEAM FILLER

We are the makers of what is undoubtedly the very best Steam Filler for Codd's bottles, and it is in constant use by many of the best makers in the country. It is fitted with a perfect Syrup and Water Saving Motion, and we guarantee it to fill perfectly 80 to 100 dozen large bottles per hour with one lad only.

Price £26 net cash, or with Improved Syrup Indicator, 30s. extra.

OVER 100 OF THESE MACHINES ARE IN ACTUAL WORK.

W. MEADOWCROFT & SON,

FRUIT ESSENCE MANUFACTURERS AND AERATED WATER ENGINEERS,

REGENT STREET, BLACKBURN, LANCS.

Also at 50 Robertson Street, Glasgow.

W. J. BUSH & CO.'S LENGTH FACTORY

The following paragraph, which appeared in the *Il Mattino* of 10th December, 1892, and other Neapolitan newspapers, viz.:—

"HORRIBLE WEATHER IN MESSINA.—A Tempest has been

"raging for the last three days. The heavy rainfall caused the

"torrents to overflow, to the great damage of the adjacent

"country. At Mili, the storm, having attained its greatest

"height, wrought great destruction in the Essence Works of

"Messrs. W. J. BUSH & CO., of London. The sea vied with the

"land in working destruction, the tempestuous waves greatly

"endangering many a vessel"

has evidently caused our competitors, both here and on the other side, a certain amount of jubilation, judging from the reports which have since been spread here, to the effect that our works in Messina were injured to such an extent as to prevent our continuing work for some considerable period.

The above-mentioned "jubilation," however, only lasted a short time, for the damage done by the storm only amounted to a few pounds in value, and work was only interrupted for a few hours.

We take this opportunity of mentioning that the market for Oils Lemon, Orange, and Bergamot remains firm at present quotations.

W. J. BUSH & CO., LONDON.

Works:-MESSINA, SICILY.

WORCESTER, READING, HARVIE, YORKSHIRE, AND BOROUGH " KETCHUP.

SILVER MEDAL. Extra Quality. 26/-38/-62/-Quality. 5/3 5/9 6/8 1 Bottles, flat or round, reputed 1 pints id. Sample Bottles, dozen parcels dozen parcels 6/9 26/-Pint Imperial, round stoppered bottles Ld. Giant 121-Gallon Casks (casks free) ...

SAUCE, a Rich Fruity & Exquisite Flavour. ROYAL CAFE

Square Glass Stoppered Bottles, containing nearly } pint Imperial, 42/- per gross. Sample Bottles at 7/- per Gross

MANUFACTORY — 30 SOUTHALL PLACE, LONG LANE, BOROUGH, LONDON, S.E. SCOTCH AGENCY-West Nile Street, GLASGOW.

THE GUARANTEED PRODUCT OF PRIME OX BEEF.

WHOLESALE PRICE-

12/6 & 21/6. LESS USUAL DISCOUNT.

INVALID BOVR

SPECIALLY PREPARED FOR INVALIDS.

SOLD ONLY BY CHEMISTS.

RETAIL PRICE-

1/3 & 2/-

PER POT.

50 times more Nourishing than Meat Extract or Beef Tea.

The "MEDICAL PRESS AND CIRCULAR":

"Certainly this preparation is of delicate flavour . . . It is
perfectly soluble . . . the small quantity required for the
immediate production of a cup of excellent cecoa will ensure for the
'Ellect Extract' a favourable reception at the hands of persons of
weak digestion, and all who prefer this
mediate production are the persons of the same of the sa

wholesome beverage to tea and coffee.

The "BRITISH MEDICAL JOURNAL" says:

"Rowntree's Cocoa Extract is one of the best. Its flavour and aroma are good. Occaa thus pre-pared is one of the most digestible articles of food,"

YORK, ENGLAND.





Composed of Liebig's Extract of Beef, Extract of Malt, and sound Port Wine.

and sound Port Wine.

REPORT ON BEEF WINES.

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Lichig's Beef Wine manusactured hy Mr. B. Robinson, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat.

Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.,

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University.)

December 15, 1888.

Introduced 1855.1

ROBINSON'S CONCENTRATED WATERS.

One Oquas of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), Saimilar in every respect to those prepare according to the directions of the British Pharmacoposia, and free from all Chemical impurity. They will keep good any length of time in any elimate.



Aqua Anethi, Concent., 4/1b. | Aqua Cinnam. Ver. Concent., 5/1b. | Aqua Foniculi, Concent., 4/1b. | Aqua Pimentæ, Concent., 4/1b. | Anisi 4/1b. | Concent., From the LANCET, July 15, 1882:..." CONCENTRATED WATERS (Hobinson's, Pendleton, Manchester)....Among the samples sent of as we find Aq. Anethi, Anisi, Cinnam. Ver., Bosso, and some dosen of others. Diluted with forty parts of water they form to exclude a savers of the Pharmacopeia. They are excellent in quality, and will be very useful, especially in country practice. [1] Wholesale Agents: HEARON & Co., London, and most Provincial Wholesale Druggists. PREPARED BY THE INVENTOR B. ROBINSON, MANUFACTURING CHEMIST, DISTILLER, AND BREWER OF BRITISH WINES, MANCHESTER.

EIGHT PRIZE MEDALS AWARDED.

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HOUSEHOLD SPECIALITIES.

YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bettles, 6d., 1s., & 2s. each.

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The Best in the World. 1d. Packets; 6d., 1s., 2s., and 6s. Tins.

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One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s. and 5s. Tins.

GOODALL'S CUSTARD POWDER.

Delicious Custards without Eggs. In Boxes, 2d., 8d., & 1s. each.

GOODALL'S BLANCMANGE POWDER

Delicious Blancmange in a Few Minutes. Boxes, 6d. and ls. each.

GOODALL'S QUININE WINE, B.P.

Best Tonic yet Introduced. Bottles, 8d., 1s., and 2s. each

GOODALL'S GINGER-BEER POWDER,

Makes the Best Ginger-Beer. Packets, 3d. and 6d.

GOODALL'S BRUNSWICK BLACK.

Painting Stoves, Grates, Iron, Tin, &c. 6d. & 1s. Bottles.

GOODALL'S LAVENDER WATER.

Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. esch.

GOODALL'S PLATE POWDER.

Polishing and Cleaning all Metals. Boxes, 6d., 1s., and 2s..

GOODALL'S JELLY SQUARES

Make a Delicious and Nutritious Jelly. In 1-pint, 1-pint and Quart Boxes, 3d., 6d., and 1. each.

PROPRIETORS-GOODALL, BACKHOUSE & CO., LEEDS

PATENT MEDICINES

AND

DRUGGISTS' SUNDRIES.

Monthly Price List of Patent Medicines, Druggists' Sundries &c., will be sent post free on application to

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"HEALTH" says:—

"By Far the Best and Purest."

"SOLAZZI."

This is the purest LIQUORICE JUICE obtainable; it is a guaranteed specific —in fact,

NATURE'S OWN REMEDY

—for Winter Coughs, Colds, and all Chest Affections.

Chemists should stock and push this article, as a safe and effective remedy, provided by kindly Nature—in preference to Patent medicines, which, in these days, yield only the barest profit. To be had, with Show Cards and Handbills, of

ALL WHOLESALE HOUSES.

"THE CHEMIST AND DRUGGIST"

"The Most Esteemed of All."

ONE BY ONE!

PASCALL'S SILVER CACHOUS

BRILLIANTLY POLISHED.

FRACRANT AROMA.

FINEST IN THE MARKET.

IN ROUND PATENT BOXES, MADE TO RELEASE ONE BY ONE.



Of the usual Wholesale Houses, and of the Manufacturer,

JAS. PASCALL, Blackfriars Rd., LONDON, S.E.

THE

BERKEFELD - NORDTMEYER FILTER



THE LANCET, September 12, 1891:—
"We have put the Berkefeld Filter through many rigid tests; we have not obtained the slightest evidence which would enable us to contest any of the statements made in regard to this filter."

ADVANTAGES.

Rapid, Perfect, and Permaner t
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LOCAL AGENTS APPOINTED.

MACHINE-CUT DRIED

BITTER ORANGE PEEL.

This season's Peel is of exceptionally fine quality, being as free as possible from pith and of good colour and aroma.

SAMPLES WILL BE SENT FREE ON APPLICATION,

CHAS. SOUTHWELL & CO., DOCKHEAD, LONDON, S.E.

TO THE

CHEMISTS & DRUGGISTS

OF

GREAT BRITAIN.

TELEGRAPHIC ADDRESS:

COLEMAN,

GEORGE'S, NORWICH,

St. George's, Middle St. NORWICH, December, 1887.

The Excise Authorities having created a difficulty as to the sale of Medicated Wine containing a certain percentage of alcohol, we obtained in January last, from the Inland Revenue Authorities, permission to sell our WINCARNIS,* or Liebig's Extract of Meat and Malt Wine, WITH QUININE, without a Wine Licence, and many Chemists not holding a Wine Licence have sold considerable quantities. In order further to meet the requirements of the trade, we have introduced a Liebig's Extract of Meat and Malt Wine, NON-Alcoholic, made from the juice of the Grape, Liebig's Extract of Meat, and Extract of Malt. This also can be SOLD WITHOUT A WINE LICENCE. Your orders will oblige either direct or through the Wholesale Houses.

Yours obediently,

COLEMAN & CO., LIMITED.

N.B.—The Wine is sold in Bottles, 2/9 and 4/6 each.

Trade prices on application.

P.S.—Where the Magistrate's Certificate is not held we are willing to pay the entire cost of a Retail Certificate (the holder of which can sell any kind of Wines) if an assorted order of 6 dozen is sent us of any of our preparations. List on application. Our WINCARNIS,* or Liebig's Extract of Meat and Malt Wine WITHOUT QUININE commands a very large sale, and is recommended by over 2,000 medical men who have sent us testimonials in its favour.

SOLE MANUFACTURERS-

COLEMAN & CO., LIMITED,

ST. GEORGE'S, NORWICH,

AND 3 NEW LONDON STREET, LONDON, E.C.

* WINCARNIS is a NEW NAME, registered to prevent fraudulent imitations.

23

BEEF JUICE.

A liquid preparation of the Choicest Beef, containing the Nutritious Albuminous principles in an unaltered and soluble form.

Because WYETH'S BEEF JUICE is Pleasant and Agreeable to the taste.

Possesses five times more nourishing properties than other similar preparations.

Nutrient and stimulant properties so proportioned that it can be retained by the stomach in extreme cases of debility.

Two-ounce bottle contains all the Nutritious Albuminous principles of three pounds of clear lean meat.

Because these and many other points of superiority have been brought to the attention of Medical Men, Nurses, and Hospitals.

Because they have proven the claims TRUE, the demand for WYETH'S BEEF JUICE has become constant, and constantly increasing throughout Great Britain.

For the information of the

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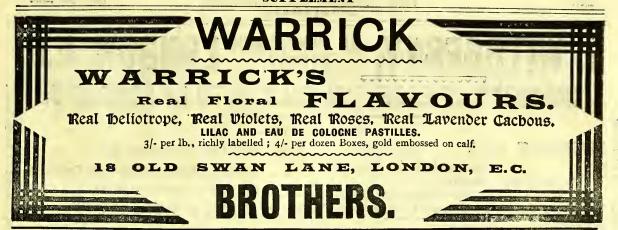
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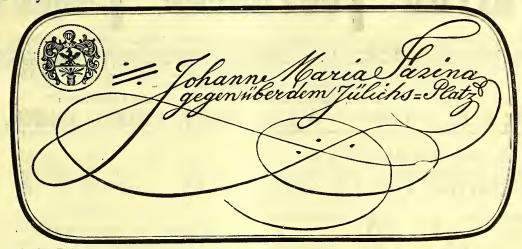
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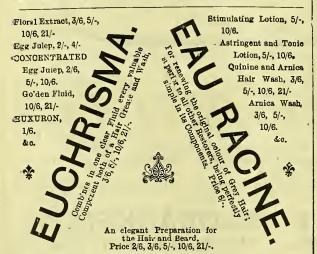
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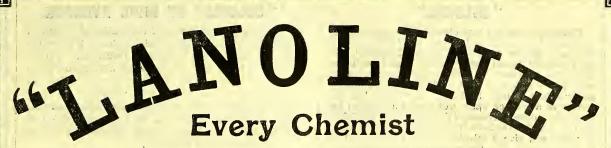
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AS AN OFFICIAL JOURNAL

The Chemist and Druggist is supplied regularly to every member of the following Societies:—Pharmaceutical Society of Ireland, South African Pharmaceutical Association, Midland Pharmaceutical Association of New Zealand, Central Association of New Zealand, Otago Pharmaceutical Association, Pharmaceutical Society of Queensland, Pharmaceutical, Society of South Australia, and Tasmanian Pharmaceutical Society.

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SHIPPERS' ISSUE.

On March 18 THE CHEMIST AND DRUGGIST will be specially circulated amongst the merchant shippers of the United Kingdom, a class of traders who have come to look forward to this issue, and who file it for reference when executing indents. For these reasons the issue is one of special value to advertisers who wish to do business with shippers; and we would advise them to make early application to the Publisher for space.

"PHARMACY AND POISON LAWS."

2s. 6d., post-free 2s. 9d.

This little book collects all the Acts of importance to chemists and druggists from the Apotheoxies Act of 1815 to the Pharmacy Acts, and it is thus a complete legal vade mecum for the chemist and druggist. These Acts are not thrown at the reader's head, but are treated as they are printed, in historical order, with full explanation of their object and interpretation. The chap er on "Interpretation of the Pharmacy Acts" gives a number of important cases affecting chemists. The Pharmaceutical Societies require candidates for licentiateship after January 1, 1893, to pass an examination upon the law on the sale of poison, and this handbook will form an excell-in manual. The authors have spared no pains in bringing together all mattes of legal importance and of professional interest to those engaged in the sale of drugg —Glasgou Herrid.

Summary.

THE British Pharmaceutical Conference will meet in Nottingham on August 14.

Mr. E. M. Holmes discoursed on "Seaweeds" to the Chemists' Assistants' Association last week, speaking mainly of the economic uses of alge.

A NEW quinine salt, the chlorhydro-sulphate, has been described to the Paris Academy of Sciences, and is alluded to in our French correspondence.

Mr. JUSTICE CHITTY has ruled, on the application of the Birmingham Vinegar Brewery Company, that the "Yorkshire Relish" trade-mark must be removed from the Trade-mark Register.

THE Liberals of Liverpool have recognised the assistance to their cause rendered by Mr. Edward Evans, jun., by presenting Mrs. Evans and him with valuable silver dessert and tea and coffee services.

THE quality of antiseptic cottons (carbolic, boric, and sublimate) offered to the trade appears to be far short of what it should be. At the meeting of the Manchester Association Mr. J. H. Hoseason read a paper on the subject.

SEVERAL new remedies are described in this issue, the more important of them being crossotal, an exceedingly bland compound of crossote, and agathin, an anti-neuralgic and anti-rheumatic remedy.

THE subject of the last analytical exercise in our Corner for Students was a mixture of alum and cobalt and manganese salts. Of this we distributed 92 samples, and 64 reports have been sent in. Mr. Moss's comments and awards are given in this issue.

DRUGGISTS in the United States are greatly agitated at present owing to the increase of the price of alcohol by the "Whisky Trust," which is sufficiently powerful to corner the atticle. Some particulars regarding the matter are given in our Trade Report.

A LIBEL action has been commenced by Dr. Henry Tibbits against the *Electrical Review*, in consequence of comments made by that journal on a pamphlet of which Dr. Tibbits was the author, and in which the electric appliances sold by Mr. Harness were recommended.

At a meeting of the North British Branch on Wednesday there were two papers and a good discussion on the preservation of spt. either, nit, with glycerine, which seems to answer well. Mr. Dott described how oxygen can be conveniently made, by acting on hydrogen peroxide with manganese peroxide.

THE Society of Public Analysts met on Wednesday evening to discuss a number of proposals for amending the Adulteration Acts. They wish wholesalers to be got at more readily, also to supersede Somerset House reference by a chemical department of the Local Government Board, and to recognise Public Analysts as Government servants.

PROFESSOR HARTLEY and Mr. W. E. B. Blenkinsop have invented a process for making drying-oil of a pale colour, and the former described it at the Society of Arts last week. After treating linseed oil with sulphuric acid (30 per cent.), they add a solution of manganese linoleate and blow air through the mixture, whereby the desired changes are effected.

The Pharmaceutical Society has succeeded in the appeal by the defendant grocer who sold Collis Browne's chlorodyne. Justices Collins and Lawrance sustain Judge Bacon's decision that the preparation is not a patent medicine, and that it is a poison within the meaning of the Act. Incidentally their Lordships expressed the opinion that the Act contemplates a more liberal application of the poisons schedule than was urged by defendant's counsel. We give a verbatim report of the judgment. The opinions expressed in a number of leading journals on the question are quoted on page 241. The Grocer objects to the triumph of the chemist—naturally; but all the public organs which have commented on the case express satisfaction with the result.



CONDUCTED BY RICHARD J. Moss, F.C.S., F.1.C.

QUALITATIVE ANALYSIS

THE subject of the next exercise in qualitative analysis will be a mixture of not more than three salts. It is to be submitted to a thorough systematic examination, all its constituents must be detected, and proof must be given that the substances detected are the only constituents of the mixture.

Students' applications for portions of the mixture (accompanied by a stamped and addressed envelope) will be received up to Wednesday, February 22, and the samples will be forwarded immediately.

Students' reports will be received up to Saturday, March 4. Each report should contain a concise account of the work done and should include a list of the constituents detected; in this list any substance regarded as an impurity should be distinguished from the chief constituents of the salts present in the mixture.

REPORTS.

The mixture of salts issued last month consisted of 90 parts of ammonium alum, 5 of cobalt nitrate, and 5 of manganese chloride. The calculated composition of this mixture was as follows:—

Co	 	 ••	 1.01
M11	 	 	 1.39
Al	 	 	 5.46
NH	 	 	 3.57
C1	 	 	 1.79
SO ₄	 	 	 38·10
NO3	 	 	 2.13
$H_2O.$	 	 	 46.55
			100.00

A notable quantity of potassium was present as an impurity, together with a trace of iron.

Nincty-two students received portions of the mixture of salts, and sixty-four reported the results of their analyses. The failures recorded in the detection of the several constituents were:—Manganese 39, nitric radicle 36, ammonium 16, cobalt 9, chlorine 7, aluminium 0. sulphuric radicle 0. The trace of potassium was detected by 43 students.

Omitting the water of crystallisation there were seven constituents to be detected. The constituent present in smallest quantity, just 1 per cent., was detected by fifty-five students out of sixty-four, while the two constituents present in largest quantity did not escape detection in any case. From the record of awards it will be seen that only two students obtained less than half marks, so it is evident that the work was on the whole carefully done.

The difficulties of the analysis were the detection of manganesc and the nitric radicle. Amongst the tests employed in the preliminary examination by a good many of our correspondents was the fusion of a little of the powder with sodium carbonate and nitrate. With a few exceptions the result observed was the production of a green mass, indicating the presence of manganese. This was an important piece of information, because later on in the systematic analysis in the wet way it was by no means easy to separate the manganese so as to identify it in its proper place. On employing an alkaline hydrate for the precipitation of aluminium, much of the maganese was also precipitated as hydrate, even in the presence of an excess of ammonium chloride. The only method of separation which gave sharp results was that depending upon the use of barium carbonate as a precipitant for the sesquioxides. Whatever method was employed there was enough manganese present to admit of its detection in the right place, with proper care, but those who did not know what to expect in the systematic analysis were clearly at a great advantage. The key of the situation, so far as manganese was concerned, was its detection in the preliminary examination.

Most of the errors in the detection of the nitric radicle arose from the want of sufficient skill in the application of the ferrous-sulphate test. Our correspondents must not expect to succeed in the detection of small quantities of nitrates unless they take the trouble to learn by experiment how the test is best applied and what are the conditions of success. Every student ought to find out for himself what is the smallest quantity of a nitrate that he can detect. A very simple series of experiments will settle this point and furnish a great deal of collateral information.

PRIZES.

The First Prize for the best analysis of the mixture of salts has been awarded to

JAMES H. SCAMPTON. 5 Highbury Terrace, Coventry. The Second Prize has been awarded to

H. WYKE TUPMAN, 204 Brixton Road, S.W.

Marks Awarded for Analyses :-

J. H. Scampton (1st prize)	100	Opoponax			75
H. W. Tupman (2nd prize)	99	F. F. A. Tunbridge			75
W. H. R	98	H. Bowden .			75
Ronman	97	Orchid			75
Timothy	96	Orexin			74
R. B. Carnegie	95	Shamrock			74
Pepsinc	94	M. D. M			73
Cymro	93	A. Stiven			72
F. W. G	92	R. A. W			71
Sylvine	90	C. N. A			71
J. Rose	90	Cono			70
D. M. L	90	Liq. Arsenicalis .			68
Analuo	89	Vertolac			66
н. ғ	89	Edgar Stabler .			65
Remus	88	Sulphorin			64
Scitamaccæ	88	G. Vogt			64
Epsilon	88	Iodic Hydrarg			63
Silicate	87	Caledonia			62
Victory	87	Phœnix		• •	61
Ozone	87	Lakola		••	61
E. C. Angel	86	C. E. Ashby .			60
Torvus	86	S. Wild			59
Quidam	85	Ornum		••	58
Zymine	85	J. Shaw		••	58
Fit via vi	83	Campanulate .		• •	57
Acidulous	82	Ichabod		• •	56
H. McL. R	81	W. J. Cox		• •	55
Some Day	80	Sunland	• ••	• •	53
Herbert	79	Alloxan		• •	52
Barium	. 78	P. Harris	" • •	••	50
A. Lander	77	Thompson	• ••	••	48
J. W. H	76	C. S. R	••	••	45

TO CORRESPONDENTS.

Prizes.—The students to whom prizes are awarded are requested to write at once to the Publisher, naming the book they select, and stating how they wish it forwarded.

Any scientific book that is published at a price not greatly exceeding half a gui ca may be taken as a first prize.

Any scientific book which is sold for about five shillings may be taken

as second prize.

Note,—All communications should include the names and addresses of the writers.

D. M. L.—The ferrous-sulphate test for uitric acid requires some manipulative skill, but with a little practice you can ensure success. It gave a very distinct brown ring in this case.

EPSILON.-Your work was well done, but a little more care might have been taken in writing out your report.

VICTORY .- Your examination for the acids was very incomplete. More special tests are required than those you applied in the preliminary exami-

E. C. Angel.—Ammonium, as you will see above, was one of the chief-constituents of the mixture. The original powder mixed with calcium hydrate and moistened evolved ammonia copiously. Nessler's test is an excellent one for a distillate, but it is inapplicable to a solution containing any metallic salt which reacts with potassium mercuric iodide.

Torvus.—You made a very superficial examination of the ammoniumsulphide precipitate: it should have been properly examined for all the

metals that might have been present in addition to cobalt.

QUIDAM .- The presence of cobalt explained the colour of the powder. If the colour of the solution had been due to a permanganate it would have disappeared on adding sulphuretted hydrogen.

FIT VIA VI.—Some ammonia was evolved on heating the powder, though you did not observe it, but a much more delicate test should have been

ACIDULOUS .- Alcohol may easily be oxidised to acetic acid so that the production of acetic ether is no evidence of the presence of an acetate in the original substance under examination, unless you are sure that the conditions of the experiment preclude the oxidation of the alcohol. The odour produced on warming the powder with sulphuric acid did not in the least suggest acetic acld.

Some Day.-Fusion with sodium carbonate and nitrate gave a green mass, though you describe it as blue. This indication of manganese in the preliminary examination was important, as it was easy to overlook that metal in the subsequent analysis.

A. LANDER.—The reaction you obtained on fusion with sodium carbonate and nitrate was clearly due to manganese.

OPOPONAX.-When you heated the powder in a closed tube, you should have observed the sublimate which formed: it consisted of ammonium salts.

F. F. A. TUNBRIDGE.—The white precipitate, which you thought showed the presence of an oxalate, was due to calcium sulphate.

Orchid.—Contrary to your observation, we found that ammonia was evolved abundantly when the powder was warmed with potassium hydrate.

OREXIN.—Both a nitrate and a chloride being present, the two acids reacted upon one another when liberated by the addition of sulphuric acid. Chlorine and nitrosyl chloride resulted from this reaction, as in the production of nitrohydrochloric acid, and it was these gases that produced the smell you observed.

SHAMROCK.—You did not mention any attempt to detect ammonium.

M. D. M.—The behaviour of the powder on platinum wire before the blowpipe-flame was not specially suggestive of borax: almost any salt containing a large quantity of water of crystallisation would behave in the

A. SLIVEN.—In heating the powder with sodium carbonate and nitrate you must have employed the reducing flame, as continued heating in that dame caused the green colour to disappear. On platinum foil out of reach

reducing gases, or on the loop of a platinum wire in the oxidising flame green mass was produced with ease.

R. A. W .- You omitted a summary of your results. It was not easy to make out exactly what your conclusion was as to the composition of the

C. N. A .- Instead of spoiling the blade of your penknife by heating the powder upon the point of it, you should have heated the powder in a glass tube, about } inch in internal diameter, and closed at one end. There was a great deal to be learned from this experiment—water of crystallisation was evolved, a sublimate was formed, gases having a characteristic smell were given off, and the solid changed colour in a certain way. From each of these observations there was an inference to be drawn.

EDGAR STABLAR.—The green mass you obtained by fusion was due to manganese; cobalt gives no such reaction. The cobalt present interfered with the coloration of the borax bead by the manganese.

SULPHOVIN.—The precipitate produced by silver nitrate in the nitricacid solution was clearly due to a chloride. See remarks to "Orexin."

G. Vogt.-See remarks to "Sulphovin."

CALEDONIA.—You ought to be able to detect a much smaller quantity of ammonium with certainty. Mix 1 part of ammonium chloride with 99 parts of sodium chloride, and see if you cannot detect ammonium in 1 grain of the mixture, using the calcium-hydrate test.

C. E. Ashby.—You describe the powder as white, and your results agree with that description; but the powder we sent you was of a very decided pink colour.

S. Wild.—The composition you assigned to the powder did not account for the green mass you obtained ou fusion with sodium carbonate and nitrate.

ICHABOD.—You might have devoted a little more care to the preparation of your report. The page of an account-book which you scut, covered with hicroglyphics, conveyed a very mixed idea of your work. Your glory is

SUNLAND .- With the very clear indications of cobalt which you obtained

in the preliminary examination you ought to have had no difficulty in isolating it in the wet analysis.

P. HARRIS.-You forgot to observe the colour of the powder. This was a serious om'ssion.

C. S. R. - See remarks to C. E. Ashby.

English News.

The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.

A Druggist's Clerk Charged with Forgery.

On Friday of last week, at the London Central Criminal Court, Frederick Babley Higginson, 23, clerk, was indicted for forging the endorsement to a cheque for 15l. 17s. 2d. Prisoner had been for about nine months in the employ of Messrs. Butler & Crisp, wholesale patent-medicine dealers, Charterhouse Buildings, and stole the cheque, which had been sent by a customer in payment of an account. The cheque was taken by a friend of prisoner's to Mr. Webb, landlord of the Golden Lion, Soho, but he declined to cash it until it had been passed through his account. This was on January 6, and on the 13th he presented a cheque for 500l. purporting to have been drawn by the prosecutors at Messrs. Robarts, Lubbock & Co.'s bank. Inquiries were made before the cheque was cashed, and it was found to be a forgery. Prisoner, who had promised to return to the bank in half an hour did not come back, and it was found that he had absconded from his employ. Inspector Outram arrested him. It was found that the blank cheque had been stolen from the middle of the prosecutors' cheque-book. Common Serjeant sentenced prisoner to eighteen months' hard labour.

Dr. Charles Rooke (Limited), Scarborough and Leeds.

The first general or statutory meeting of the shareholders of this company was held at the registered offices, 18 Guildford Street, Leeds, on February 8, 1893. Mr. W. B. Mason, of Harrogate, the managing director, presided. The Chairman said the meeting was held in accordance with the Act, and the business was of a formal character only. He informed the shareholders that since the company had been formed extensive advertising had been put into operation, and the results of the trading so far had been exceedingly satisfactory. He also informed the meeting that the directors had decided to pay an interim dividend on the preference and ordinary share eapital at the rate of 10 per cent. per annum for the three months ending February 1, dividend to be payable on February 15. After a vote of thanks to the Chairman had been accorded and acknowledged the meeting terminated.

Theft of Gum and Shellac.

At the London County Sessions on Friday, February 10, Edward Eager, 36, grocer, and Alfred Green, 37, dealer, were convicted of stealing and receiving five eases of gum and ten cases of shellac, value 200l., the goods of Messrs. Fardell & Co., carriers. The two prisoners had for a long time been suspected of being receivers of stolen property, and on January 10 were followed to the docks, where they were seen to remove the gum and shellac into a hired van. Sir Peter Edlin sentenced Green to seven years' penal servitude and two years' police supervision, and Eager to five years' penal servitude.

Smallpox

is rather more prevalent in this country than is comfortable for the sanitary authorities. The British Medical Journal's reports show that it is the common lodging houses and workhouses that are the chief means of disseminating infection; and the question has become one of much moment. Navvies have been attacked in several places. The disease continues to prevail chiefly in Manchester, Oldham, Halifax, Leicester, and Glasgow, and is spreading in Southampton; whilst there are signs of extension to the south-western counties of England. In London there are about 30 fresh

cases every week; in Lancashire there have been over 300 cases, most of them about the Manehester district; in Leicester there has been a great run on vacciue lymph, and the anti-vaccination crusade is temporarily snuffed out—a dozen fresh eases of smallpox were notified there last week. Seotland remains the centre of interest, and the demand for vaccine in Glasgow is beyond all proportions previously heard of. In the Registrar-General's Report for England and Walcs, issued on Wednesday, it is stated that smallpox has been pretty constantly spreading for many months past. There are now 128 patients suffering from this disease in the hospitals where such eases are treated.

"Amusement and Applause."

There was a meeting in Birmingham recently to further the cause of the British Institute of Preventive Medicine (the sanctuary of the high priests of vivisection). A resolution was passed cordially approving of the objects of the Institute. Mr. Lawson Tait was amongst those who spoke in favour of the Institute. He said he fully assented to the resolution, feeling that, while he objected to a certain class of surgical investigations, bacteriological experiments on animals had proved of great value. This declaration, says the chronicler, was recei ed with amusement and applause. Dr. Armand Ruffer and Professor Victor Horsley were amougst the speakers.

Pharmaceutical Football Club.

This club had a very successful smoking-concert at the Frascati Restaurant, Oxford Street, W., on Friday last week. Mr. Carteighe presided, and there was a company of about 160, including Professors Dunstan and Green, Mr. H. G. Greenish, and many old "Square" students. The programme was an excellent one, Messrs. Alan Dale, F. Morley Taylor, G. Reginald Edwards, and Chater being amongst the favourites. The Chairman gave a rendering of "Father O'Flynn," which greatly pleased the company. Messrs. Ernest J. Eastes and H. Browne were accompanists.

A Dangerous Chemist's Shop.

Mr. Thomas Williamson, ehemist, King Street, Penrith, has been summoned by the Local Board of that town for failing to comply with an order of the Board to put his premises into proper repair. The Board's surveyor had reported these premises to be in a dangerous condition, and it was said that the fixtures in the shop were bearing the full weight of the floor above. The owner of the premises had been summoned also, but he had died before the hearing. Mr. Williamson intimated to the Magistrates, on February 7, that he had delayed having the repairs done, because he was trying to get some guarantee of compensation for his expenditure. After discussion, the Magistrates decided to adjourn the ease, as they did not see their way to make the order then.

Fire at a Chemist's Shop.

Fifty pounds' worth of damage was done by a fire on the premises of Mr. J. C. Stevenson, chemist, Todmorden, on Saturday last.

The Hon. Apotheearyship of the Manchester Infirmary.

A fortuight ago we announced the resignation of Mr. Standring, one of the honorary visiting apothecaries of the Manehester Royal Infirmary. It now appears that Mr. W. Stones (Messrs. Jewsbury & Brown) and Mr. F. Baden Benger (Messrs. Mottershead & Co.), who were joint honorary apothecaries with Mr. Standring, have also tendered their resignation, in consequence of increasing pressure of business-engagements. Both Mr. Benger and Mr. Stones had held office for about teu years. In each ease the Board of Management accepted the resignation with regret, and tendered an expression of their thanks for, and appreciation of, the valuable services rendered to the Infirmary during the past ten years. At the annual meeting of the trustees of the Infirmary, held on Friday, February 10, Mr. G. H. Westmaeott and Mr. F. R. Cooper were appointed honorary apothecaries.

The British Pharmaceutical Conference 1893 Meeting.

We are informed by Mr. F. Ransom, Honorary General Secretary of the British Pharmaceutical Conference, that the

meeting at Nottingham will open on Monday, Angust 14. The *conversazione* will be held on the evening of that day, and the meetings for business on the two following days. The excursion will, as usual, take place on the Thursday. Further details of the arrangements will be published in due course.

Drug-adulteration in Leicestershire and Staffordshire.

The Leicestershire County Analyst reports that during the past quarter twenty-two samples of sweet spirit of nitre were examined. Five were made with methylated spirit instead of spirit of wine, and three contained less than the proper amount of nitrous other.

During the past quarter one sample of spirit of nitre was submitted to the Staffordshire County Analyst. Taken as "spirit of nitrous ether," under which name it ought to be purchased (remarks the analyst), the sample was 50 per cent. only of the minimum strength of the Pharmacopæia. A sample of Spanish juice submitted was found to be mixed with 30 per cent. of farina.

The Consumption of Ganja in India.

In the House of Commons on Tuesday, Mr. Caine asked the Under-Secretary of State for India whether the Indian Government had yet forwarded to the India Office the further despatch dealing with the case of ganja and other drugs, promised in paragraph 4 of its despatch, dated October 14. 1891, contained in the Blue Book "Consumption of Opium in India," presented to Parliament last year; and, if so, whether he would lay this further despatch upon the table of the House.

Mr. G. W. E. Russell: Yes, sir; the report on ganja, with connected papers, will be laid on the table, if my honourable friend will move for them.

The Price of a Vinegar-eask.

At the Rochester County Court, on February 8, Mr. Albert Anning, chemist, Maidstone, sued Mr. W. G. Neate, a groeer, for 10s. Plaintiff had sold to defendant a eask of vinegar for 1l. 12s. 6d., including eask. The price of the vinegar, 1l. 2s. 6d., had been paid, and plaintiff now sued for the value of the eask (10s.). Defendant stated that since the transaction he had transferred his business. Judge Selfe said if defendant had not returned the eask he must pay for it, and judgment was given for plaintiff.

The Mineral-water Trade.

The members of the Manehester and District Mineralwater Trade Protection Association held their annual dinner on February 9, under the presidency of Mr. R. Boardman. From Mr. W. Bratby, of the firm of Bratby & Hinchliffe (Limited), aërated-water engineers and manufacturing ehemists, a letter was read from which we take the following passage:-"With reference to the brewers' exhibitions to be held in Manchester and Birmingham in April or May next, surely we have already sufficient exhibitions in connection with the trade, and I can scarcely imagine that any of our competitors will be so foolish as to go to the expense of exhibiting at any outside shows of this kind. Our firm do not intend to exhibit, and will not in any way encourage these exhibitions. To those who are undecided about exhibiting I would say, Consult your solicitor, who would advise that all exhibitors are liable to have their exhibits seized and sold for rent, &c., in the event of the promoters being unable to meet their liabilities. . . Should the general body of the trade feel that there is a necessity for another exhibition in addition to the one held annually in London, there is not the slightest reason why such an exhibition should not be held; but by all means let the show be run by the Mineral-water Trade Alliance for the benefit of the trade." In the after-dinner speeches there were one. or two passages which are worth reproducing. Mr. R. Johnson, J.P. (Wigan), said that, although he had not what could be called precise data to go upon, he estimated that. there was invested in the mineral-water trade of the United Kingdom something like ten millions of money. The development that had taken place within the past ten years was still going on, and it was not confined to the mineralwater trade alone, but extended to the allied trades, which were engaged in the making of bottles, the sale of essences,

the construction of machinery, and so forth. He predicted that the time would come when the mineral-water trade would become the chief eaterers for refreshments. Mr. Davenport (London), in a speech in reply to one of the toasts, said that from the dustyards of London alone they had during the past year recovered bottles to the number of of 180,000 dozen, and it was believed that when the Merchandise Marks Aet was amended the number would be increased to 280,000, for at present they could not pretend to collect all the bottles they had lost. He maintained that the only bottles they ought to collect were those which had been lost or mislaid. He also criticised the continued presence in the Associations of so many hon members. They were very useful in the beginning, he said, but the trade ought no longer to receive charity from them. On both of these points Mr. Davenport's opinions were received with expressions of disapproval. Mr. Tuke, secretary of the Allianee, said the proposal to abolish the allowance for bottles brought in might suit very well in London, where there was one bottle-exchange, but in Manchester they dealt with a much larger area, and unless some remuneration was given for the bottles brought in they would probably lie in the yards till the season was over. They believed that by giving the remuneration they were able to get in the bottles more regularly, and turn them over more frequently during the season.

Festivities.

The annual dinner of William Bleasdale & Co.'s employés was held in Thomas's Hotel, York, on Saturday night last. The chair was occupied by Mr. Grierson (manager). After a substantial repast, the toast of "The Firm" was proposed by Mr. Humphreys, who, in a humorous speech, referred to the new trade which the firm was developing rapidly. The Chairman, replying for the firm, pointed out the necessity for every individual employé to exert himself and to avoid friction. "The health of the Travellers" was proposed by Mr. Joseph Puckering, and replied to by Mr. C. H. Collins. Other toasts followed, with songs and recitations.

On Monday last the M.S.-V.P. Club (G. B. Kent & Sons, Great Marlborough Street, W., and Victoria Park, E.) gave an evening concert at the Victoria Hall, Approach Road, E., when an attractive programme was got through in good style. Among those who gave their services were members of the firm and heads of departments, as well as employés and friends. The mandolin solos of Mr. Ernest N. Kent, accompanied by Mrs. Ernest N. Kent, were heartily encored in each part. Mr. Arthur B. Kent was especially happy in the recitation "Dot baby off mine," nearly a thousand people testifying their appreciation with vociferous applause. Regret was expressed that, through indisposition, Mrs. Arthur B. Kent was unable to be present, her name being on the programme for two songs; and the assembly, addressed by a visitor, requested that Mr. A. B. Kent would convey to her their sympathy and hopes for a speedy recovery. The other artistes were Miss Winifred Parker, Messrs. Stevens, Hedger, Chapman, Masters, Giles, Percy Medley (violin solos), and Mr. E. J. Reid, whose musical effort and recitations evidently gave satisfaction all round. Mr. Harold Kent, the senior partner, was the M.C. of the evening, and the impromptu remarks made by him between the items in the programme added piquancy to the entertainment.

The Proposed Cottage Hospital for Dartford.

The Dartford people are exerting themselves to secure the necessary funds for the proposed hospital, to which Mr. S. M. Burroughs has promised 1,000% conditionally. A public meeting is to be held at the Conservative Hall, presided over by Lieutenant-Colonel Kidd. It is eonsidered the cost, exclusive of the site, will be, for a hospital of ten to twelve beds, about 2,000%, and that the annual cost of maintenance will amount to about 400%. For the building 1,187% odd has been promised, and the annual subscriptions promised amount to 131%. 5%. Messrs. Burroughs, Wellcome & Co. have intimated their intention of subscribing 15% annually and presenting 10% worth of drugs.

A Herbalist's Mistake.

Mr. F. Moverly, herbalist, of 4 Great Passage Street, Hull, informed the police on Friday, February 10, that he had taken

about 2 oz. of foxglove-root in mistake for dandelion-root. He became very ill, and was conveyed to the Royal Infirmary in a cab, where he was treated for poisoning.

Coroner and Doctor both Wrong.

Mr. G. P. Wyatt, Coroner, held an inquiry on February 9. at Camberwell, concerning the death of a woman, named Elizabeth Oves, lately residing at Elsted Street, Walworth. A daughter of the deceased said her mother had been in ill health for a considerable time, and was in the habit of taking laudanum. She did not eat any food, but had remarked that laudanum was as good as food for her. She (witness) used to purchase it from a chemist's shop in Rodney Road, and so frequent were her visits to the shop that she had only to place the money and the bottle on the counter when she was at once supplied.

A Juryman: I should like to know whether ehemists have any right to sell dangerous poisons in such a reckless manner

as this.

The Coroner: It is not a scheduled poison, I believe, and any person may purchase it in small quantities at the ehemist's.

Dr. Hardy: It is a scheduled poison, and ought to be signed for by the purchaser in the usual way.

The Coroner: There is not even a label on the bottle at

present.

Some other evidence was given, and ultimately a verdict was returned that the woman died from syncope, and that the death was accelerated by an overdose of laudanum.

Presentation to Mr. and Mrs. Edward Evans, jun.

On Monday evening, in the Reform Club, Liverpool, Mr. Edward Evans, jun. (ehairman of the Liverpool Federal Council, and ex-chairman of the Reform Club), and Mrs. Evans were entertained to dinner in the grand dining-room, to which 200 guests sat down, ladies forming at least one-half of the company. Mr. Osear I. Van Wart (chairman of the Club) presided, and amongst those present were Mr. and Mrs. Edward Evans, jun., Mr. E. N. Evans, Mr. J. Evans, Miss Evans, Miss Noel Evans, Miss Rita Evans, and Mr. Arthur B. Evans. There were only two toasts, "The Queen" and "Mr. and Mrs. Evans": but Mr. Evans proposed the Chairman's health. Thereafter an adjournment was made to the library, and, in the course of the evening, Mr. Van Wart presented magnificent services of silver plate to Mr. and Mrs. Evans, in recognition of Mr. Evans's great services to the Liberal party of Liverpool. There was read a letter from Mr. Gladstone about this; he had heard of the matter "with mneh pleasure," and sent "his warm congratu-lations." The Lord Chancellor was also "glad that the Reform Club proposed to recognise the great service Mr. Evans had rendered to the Liberal party in Liverpool." Mr. Evans acknowledged the presentation amidst much enthusiasm. The service given to Mr. Evans is of solid silver, and comprises five dessert-stands, with dishes to match. Aeeompanying the service there is a pair of solid silver candelabra. The whole of the pieces are heavily gilt with pure gold, and are fitted into a polished oak case, lined with royal blue, and having in the eentre of the lid a plate with the monogram of Mr. Evans. The centre-piece bears a suitable inscription. The gift to Mrs. Evans consists of a solid silver tea and coffee service, with silver kettle to mateh.

Fatal Mistakes with Poisons.

Thomas Petter, a earter, residing at Trotton, Sussex, had been kicked by a horse, and, being unwell otherwise, eonsulted Dr. Counsell, Hill Brow, Liss, who gave h'm a bottle of mixture for internal use, and a bottle of liniment for outward application. The latter was aeonite liniment, and was labelled "Poison," in red letters. On his way home Petter drank a pint of stout, and subsequently, feeling poorly, took one of the bottles from his pocket and drank from it about two teaspoonfuls. Shortly after, he felt he had taken the wrong medicine, and on coming up to Thomas Brightwell, a labourer, asked him if he was any seholar. Brightwell replied, "Yes." Petter then showed him the bottle he had drunk from, and at once was told he had drunk the liniment. Brightwell told him he had better put his finger down his throat and try to vomit, but he could not do so. He then went to the eottage of Henry Luff, where salt-and-

water was given him, but he could not swallow. Death resulted a few hours later. At the inquest the jury returned a verdict of death from misadventure, exonerating the doctor from blame.

An inquest was held at Birmingham, on February 10, on the body of Frederick Powell (35), bricklayer. Deceased returned home intoxicated on the previous Tuesday. In his bedroom a bottle containing spirits of salt was placed close to a bottle containing whisky. He took a drink from it, and died a few hours later. Mr. Hadley, surgeon, said the bottle from which deceased drank contained a mixture of chloride of zinc and muriatic acid. The label on the bottle indicated that the contents were medicine, but the liquid was a strong corrosive poison. A verdict of death by misadventure was returned.

An Ointment-customer.'

Last week, Frank East, 21, was committed for trial from the Thames Police Court on a charge of stealing a silver watch and gold chain from the person of Mr. Robert W. Adams, chemist, of Redman's Road, Mile End. Prosecutor deposed that East entered his shop and called for some ointment. After receiving the article he grabbed at his (prosecutor's) watch and chain, and ran off with them. When outside prisoner fell down, and as witness was about to seize hold of him a number of other men interfered. East then made his escape. The watch and chain had not been recovered. The accused denied the charge.

Society of Public Analysts.

A special meeting of this Society was held at the rooms of the Chemical Society on Wednesday night. Mr. M. A. Adams (Public Analyst for Kent) presided. The object of the meeting was to consider certain resolutions in regard to the administration of the Adulteration Acts, and, in addition to a large representation of the members of the Society, several public men were present. We may say that all the resolutions were adopted. The first called for amendment of the laws relating to adulteration, and the second, on the ground that the present Acts often operate unfairly on the retail traders, urged provision to ensure in many cases of adulteration the prosecution of the real offenders.

Dr. Cameron, M.P., speaking on this resolution, said retail dealers sold food and drugs with an implied warranty, and he thought that the wholesale dealer should be obliged to do the same, except when a written notice stating was given

that the article sold was a mixture.

Mr. H. E. Kearley, M.P., spoke in favour of an amendment of the law which would give the inspectors the same power of entering wholesale warehouses and taking samples from bulk as they now had of entering the premises of retail traders.

The next resolution held that, as "the Food Acts are practically dead letters in a large area of the United Kingdom, it is necessary that adequate provision be made for securing uniformity in their application and in their due enforcement." Some of the speakers wanted the administration of the Acts taken away from the county councils, many of which were composed to a large extent of traders who were not desirous of putting the Acts in force. In subsequent resolutions grants from the Imperial Exchequer were called for, also the creation of a Chemical Department of the Local Government Board, with the public analysts as officers of the Board. Then the present system of reference to Somerset House was considered to be unsatisfactory, the compulsory com-bination of the two offices of medical officer of health and public analyst was thought to be undesirable, and it was considered necessary that provision should be made to ensure more adequately than heretofore the proper qualification of public analysts.

Frish Rews.

Poisonous Proprietaries.

The Constabulary authorities are at present very active in looking after the sale of poisons by unqualified traders. A prosecution is pending against a grocer in the country for selling a bottle of "Mrs. Winslow's Soothing Syrup," which bore on the cover the following label:-"This preparation, containing, among other valuable ingredients, a small amount of morphine, is, in accordance with the Pharmacy Act, hereby labelled Poison."

The Late Action against a Dublin Chemist.

The doctor concerned in the case against Mr. Curham, reported last week, forwarded the mixture complained of for analysis to the Somerset House authorities. The following is the prescription as shown in court. The mixture presented a cloudy, milky appearance. The doctor alleged that it should be quite clear and colourless.

> Acid. hydrocyanic dil. .. min. 24 Liq.bismuth.. 5vj. • • • • Spt. chlorof. Aq. cinnamomi ad .. 14.

Companies and Pharmacy Law.

The Council of the Pharmaceutical Society have embarked in a legal attack on "the limited liability" question, and the first of a series of prosecutions for compounding prescriptions and selling poisons, against a limited company, islikely to take place next week. It is hardly probable that the question will be finally decided before the magistrates.

Scotch News.

Glasgow Chemists at Supper.

The annual support of the members of the Glasgow Pharmacentical Association took place on the evening of February 9, in the Alexandra Hotel. Over eighty gentlemen sat down to supper. Mr. W. L. Currie, the President of the Association, occupied the chair, and the croupiers were Mr. John Foster, Mr. Samuel Frazer, and Mr. Thomas Robinson. Messrs, D. Storrar, Kirkcaldy; J. L. Ewing, Edinburgh; Peter-Boa, Edinburgh; J. Rutherford Hill, Edinburgh; and Drs. Beatson, Hawthorne, and J. McGregor Robertson were present as the guests of the Association. After supper a long toast-list was put through. Dr. Hawthorne proposed "The Pharmaceutical Society," for which Mr. Ewing replied. "The Glasgow Pharmaceutical Association" was proposed by Mr. Storrar, who said he was glad to see such a society in Glasgow. At present there seemed to be great activity amongst chemists all over the country. In every town of any importance they were banding themselves together; it was a good sign. He would, however, like to see more of the members of the local associations joining the Pharmacentical Society. It was of no use to stand outside and criticise the Society; it was only by coming inside that they could do anything. (Cheers.) Mr. Currie, in his reply, stated that the membership of the Glasgow Association now numbered nearly 120. Mr. John McMillan gave "The Medical Profession," to which Dr. Beatson replied. The other toasts were "The Ladies," "Our Guests"—Mr. Boa, Edinburgh, replying to the latter—"The Croupiers," and "The Chair."

Presentation.

The Aberdeen Junior Chemists' Association entertained their President to supper in the Waverley Hotel last week, and Mr. Andrew Craig, jun., who was in the chair, on behalf of the Association presented to Mr. Strachan a handsomecamp-desk, which bore the inscription "Presented to Mr. A. L. Strachan by the Abcrdeen Junior Chemists' Association on the occasion of his marriage, February 1, 1893," and expressed the hope that he would long be spared to enjoy hymeneal bliss. A number of toasts and songs followed.

Where will the Saving come in?

At the annual meeting of the Corporation of the Aberdeen Royal Infirmary, the Chairman, in the course of his speech, commenting on the increased expenditure, said:—"Then as to medicines: that is an item in the account which is still very high, and seems to be going up. I do not see any of our medical friends here, otherwise I should be inclined to ask them to explain how it is that in an age in which drugs are supposed to be going more and more out of fashion, we are paying every year a very considerably increased amount for medicines."

French Pharmaceutical News.

(From our Paris Correspondent.)

PROFESSOR HARDY, a former President of the French Academy of Medicine, has recently died. He was in his 83rd year. Professor Hardy had specialised in clinical medicine, and as a teacher of clinical medicine he was justly famous.

ANTISEPTICS IN THE FRENCH ARMY.—It is interesting to note, in connection with Sir Joseph Lister's recent pronouncements regarding the merits of carbolic acid and corrosive sublimate, that there is used in the French Army Medical Service four times as much sublimate lint as carbolic lint, and the boric lint used equals the carbolic. Although the quantities of the pure antiseptics are very different, these figures in regard to lint are the truer indication of the relative popularity of the antiseptics in France.

A Professor's Wife.—M. Baillon, professor of botany at the Paris Faculty of Medicine, continues to be troubled with matrimonial matters, and, not satisfied with suing for a divorce, he has now brought an action with a view of obtaining the incarceration of his wayward spouse. In opening the case last week before the Civil Tribunal of the Seine, M. Baillon's counsel traced the history of his client's married life with an attempt at humour. "M. Baillon," he said, "was 40 years of age when the idea of marriage occurred to him. On July 9, 1874, he was wedded to Mllc. Boileau. He brought her a fortune of 200,000f. and his fame as an eminent botanist. The young lady had nothing but the freshness of her twenty summers. They lived happily until October, 1891. M. Baillon has known the joys of paternity: two boys and two girls. His reputation has increased, and he became professor at the Paris Faculty of Medicine, and he thought himself happy. He was drawn from his serenity, however, by a shower of summonses." It appears that M. Baillon and his wife were living at the rate of 60,000f. a year, while the professor's salary was only 12,000f. His wife explained the difference of income by informing the Court that she receives 50,00 f. a year from an anonymous lady friend. But she was unable to deny the accusation that, while occupying a villa at Dieppe, she received, in her husband's absence, a number of visits from her personal gentlemen friends. A curious part of the case is that Dr. Luys, a well-known specialist, delivered M. Baillon a certificate of his wife's mental derangement without seeing the lady. The Court has reserved judgment.

A NEW QUININE SALT.—Chemistry has just enriched medicine with a new product, having quinine as a base. If such authorities as MM. Grimaux, professor of chemistry at the Ecole Polytechnique, and Laborde, chief of the physiological laboratory at the Paris Faculty of Medicine, are to be credited, their experiments tend to show that it is capable of rendering real service to therapeutics. The chemical in question is chlorhydro-sulphate of quinine. The following are, according to MM. Grimaux and Laborde, the advantages of this new salt:—The salt, which is represented by the formula (C₂₀H₂₄N₂O₂)2HCl,H₂SO₄3H₂O, is very soluble in water; it dissolves in its own weight of water at an ordinary temperature. Under these conditions it can be easily absorbed by the digestive organs, while medicinal sulphate requires more than 700 parts of water, and only, apparently, dissolves in the stomach by the aid of the acid gastric juice. This ease of solubility renders it very useful for hypodermic injections. A solution prepared with 5 grammes of salt and 6 c.c. of water contains 50 centigrammes of salt per c.c. A further advantage is that it contains for the same weight the same quantity of quinine as crystallised medicinal sulphate; with 7 molecules of water it contains 74.2 per cent. of quinine, while medicinal sulphate at 7H₂O contains 74·3 per doses as the latter. A full description of the new product was given by M. Laborde at a meeting of the Paris Academy of Medicine on Tuesday, February 14. He claimed that the therapeutic effects of the salt are at least equivalent to that of sulphate of quinine.

poreign and Colonial News.

CEYLON TEA IN CHINA.—Shipments of Ceylon tea are going to be sent to Hankow. in China, where the tea is to be made into bricks, and earried by the caravan route through Siberia to European Russia.

THE THREATENING EPIDEMIC.—The Council of the eity of Hamburg has voted a credit of 45,500l. to defray the cost of preventive measures against cholera, to be taken from the present time to the end of March.

PHARMACY IN HUNGARY appears to be in a somewhat anomalous condition compared with medicine. Budapest. for instance, boasts of 728 medical men, and only 59 pharmacies—i.e., one pharmacist to every 9,000 inhabitants, and one doctor to every 700.

TO CHECK DR. LAUDER BRUNTON.—Professor H. A. Hare, of Philadelphia, has been asked to undertake a research, at the expense of the Government of the Nizam of Hyderabad, India, with the object of reconciling, if possible, the conflicting views concerning the action of chloroform.

Drug-smuggling Severely Punished.— Dr. John Alexander Borst was recently arrested at Niagara Falls, N.Y., for smuggling a quantity of phenacetin into the United States from Canada. At his trial he pleaded guilty, and was sentenced to imprisonment in the Albany county penitentiary for the term of one year and one day.

AMERICAN CHEMICAL SOCIETY.—The annual meeting of this Society has recently been held, and Mr. Albert C. Hale, Brooklyn, N.Y., was appointed secretary. The retiring President, in his address, stated that in the "twenties" of this century there were twenty papers by American chemists, and they were on inferior lines as compared with the chemists of the Old Country. In the eighties there were over 900, equal in every respect with those of the Mother-country.

Vanillin.—The firm of Boehringer, of Mannheim, have patented in Germany a process for the manufacture of vanillin. Starting with an aromatic ether of eugenol, such as eugenol-benzyl ether, by heating it with an alkali solution it is changed into the iso-compound, and thereafter, by treatment with an oxidising mixture (potassium bichromate and sulphuric acid), the corresponding aldehyde (vanillinbenzyl ether) is produced. It then only remains to treat the product with hydrochloric acid, when vanillin and benzyl chloride are set free. It follows from this that oil of cloves (which is rich in eugenol) may be the starting-point.

THE PURITY OF TURKISH OPIUM.—A correspondent of the Levant Herald protests against the view which he believes to prevail in many quarters that Turkey opium is frequently adulterated before it reaches the Smyrna and Constantinople dealers. He maintains that there is no crop of similar value in any part of the world which is less subjected to adulteration than Turkey opium. Not twenty-five cases out of the 7,000 which constitute an average crop could be picked out as containing no morphia, and not 2 per cent. of the whole as impure or adulterated. The fact is it does not pay to adulterate, for the buyers reject such adulterated stuff at once. Many of them analyse what they buy, and the public examiners perceive the adulteration at a glance. Moreover, the largest market for opium is the United States, and the laws there will not permit of any adulterated opium being imported into the country. The standard is 9 per cent. of morphia, and any opium which contains less than that on Government analysis is seized. The fact that opium has sometimes been seized at the Turkish Custom Houses the writer attributes to the ignorance of the official analysts. "It is extremely difficult," he says, "to analyse opium correctly. There are only a few specialists in London, New York, and Amsterdam who can do it. As a matter of fact, a lot of twenty-seven cases belonging to an English merchant which was classed as adulterated recently by the Constantinople analysts, has since been delivered as it stood to the Dutch Government under a contract of the most stringent nature as regards yield of morphia, and was at once passed."

The Minter Session.

CHEMISTS' ASSISTANTS' ASSOCIATION.

At the meeting of the Association on Thursday, February 9, a paper was read on

"Seaweeds."

By E. M. Holmes, F.L.S.

The author confined his attention to algo of chief pharmaceutical interest. Perhaps the best-known genus of algae, from the pharmacist's point of view, is Fucus. There are six common and two rare species, excluding varieties, of this plant found in Britain. Amongst these are F. caniculatus, F. platycarpus, F. vesiculosis, F. nodosus, and F. serratus. Fucus resiculosis and F. nodosus possess air-bladders, but are distinguished from each other by the former having a midrib with the bladders situated on each side of it, while in the latter the frond is compressed with the airvesicles in its substance. The positions in which the various species are found are very different. Fucus caniculatus grows on rocks near high-water mark, Fucus platycarpus grows fairly near the high-tide level, and the others follow in regular order, showing regular zones of growth as distinctly separate as rows of chairs. The litting-power of the bladder-wracks is very considerable, and these vesicles also serve to keep the plants afloat. An idea of the vast quantities of fuci that grow on our shores may be formed from Mr. Stanford's statement that he had seen 10,000 tons cut in a single loch in the summer. One hundred tons of wet seaweed yield 5 tons of kelp or 2.5 tons of soluble salts; so that one loch would yield 250 tons of salts. Enormous amounts of work in abstracting the salts from the water are thus effected. It has been suggested, too, that the amount of certain salts depends largely on the amount of exposure the weed has, and from Mr. Stanford's table it is seen that the amount of iodine present is less in those varieties which are exposed to the air longest :-

		Io	dine per ton
Fucus vesiculosus		 	*665 lb.
Fueus nodosus		 	1.282 ,,
Fucus serratus .		 	1.887

But other algae which are exposed only at extreme low tides contain far more iodine: --

			Ic	dine per to
	Himanthalia lorea	 		1.993 lb.
	Chorda filum	 		2.633 ,,
	Halidrys siliquosa	 		4.773
	Chordaria flagelliformis			6:298

It thus appears that the official species of Fucus do not

contain the largest quantity of iodine.

The author then referred to certain species of Laminaria which yield from 6 to 10 lbs. of iodine per ton. Comparing the amount of iodine found in the plants with that occurring in sea-water, striking results are seen. Sea-water contains 1 part in 291,000,000, while Laminaria digitata kelp contains 1 in 250, thus showing an extraordinary power of absorbing and retaining iodine from the water; and the fact that many species are perennial does not account for this. Mr. Stanford investigated the nature of the mucilage found in so many varieties, and found it to consist of the sodium and magnesium salts of an organic acid, which he named algenic. Mannite, too, was found in the dried plants. Algin was described and specimens of it were exhibited. There are many varieties of dietetic algae, but not many are employed in this country. In Scotland it is possible to obtain a variety of Rhoymenia, which is sold under the name of "dulse"; and the midrib of Alaria esculenta is eaten in Ireland as "merlins." Porphyra laminata is eaten as a vegetable, sometimes boiled with milk, and is known as "laver." In China and Japan enormous quantities of marine algae are utilised for food, especially in soups and made-dishes. Many of the algoe are useful for making jelly—notably Chondrus crispus, Euchcums spinosum, and Gelidium spinosum. Each plant produces a characteristic jelly with distinct keeping properties and melting point. Irish moss is the only kind producing a jelly which will dissolve quickly in the mouth, but unfortunately its keeping properties are poor; that from Eucheuma spinosum is much better; that

from Gelidium spinosum. which melts at too high a temperature, is largely used in France for dressing silks. It possesses the property of gelatinising more water than any other known alga. Japanese isinglass (agar-agar) has been suggested for use in pharmacy for making tannin suppositories; it has also found a place as "an adulterant" of table-jelly. An interesting case of this had cropped up in which the jelly was firmer and less soluble than usual, and much difficulty was experienced in detecting the adulterant until, when examined under the microscope, a beautiful Japanese species of a diatom (Arachnoidiscus Ehrenbergii) was detected. This at once gave the clue, since Japanese diatoms do not grow on French fruit-trees. The mucilaginous substance from Chondrus crispus has been described under the name of carragheen, but there is doubt as to whether the substance examined was pure. In concluding, Mr. Holmes said that there is a vast field for chemical research in the algae which might be well taken up by pharmacists.

A vote of thanks to the author was proposed by Mr. W. A. Morris and seconded by Dr. F. W. Passmore. The paper was properly illustrated throughout with specimens of fresh

and dried seaweeds and diagrams.

LIVERPOOL PHARMACEUTICAL STUDENTS' SOCIETY.

At the meeting on Thursday, February 9, a paper was read by Mr. T. S. Wokes on "Homosopathy." The author described the founding of homosopathy by Hahnemann, and indicated some of the principles laid down by him which have been abandoned with increasing knowledge, especially the extremely minute doses which his super-dilutions lead to. In the second part of the paper homosopathic pharmacy was dealt with on the lines of the Homosopathic Pharmacopoeia. A discussion followed the reading of the paper.

EDINBURGH CHEMISTS', ASSISTANTS', AND APPRENTICES' ASSOCIATION.

Mr. C. F. Henry at last week's meeting opened a discussion on "The Pharmacy Act, 1868, in its Relation to the Salc of Poisons," the absence, through serious illness, of Mr. A. G. Hendry preventing the latter taking his promised part in the discussion. After considering the Act pretty fully, Mr. Henry came to the conclusion that, badly constructed though it is, it has been of great benefit to the trade, as well as to the public. Legal decisions had made it go further than the promoters hoped or intended. The recent decision in regard to patent medicines has not yet had time to confer much benefit on the trade, but if it should be uphcld it would, he thought, tell with its full force as time went on, and all legal poisons would be sold to the public, as they ought to be, only by registered chemists, or under their immediate supervision. The discussion was continued by the President and Messrs. Macpherson, McEwan, J. R. Hill, and others, general agreement with the opener being expressed.

MANCHESTER PHARMACEUTICAL ASSOCIATION.

THE monthly meeting of this Association was held on February 8, at the Victoria Hotel. The gathering, "small, but select," was presided over by Mr. Harry Kemp, Vice-President.

COMMERCIAL MEDICATED WOOLS.

Mr. J. Henry Hoseason read a paper descriptive of an examination of some commercial medicated wools. He said that, so far as he knew, the subject was one which had, up to the present time, escaped the eye of the critical pharmacist. No doubt many had had their suspicions regarding the strength of these articles, and that these suspicions had not been entirely unwarranted he thought would be made evident by even a casual glance at the results he had obtained from the analyses of a few samples. These results he had tabulated. He had examined three varieties out of the many which had been introduced for the purpose of antiseptic dressing—viz., carbolic, boric, and sublimated wools. As these were most commonly in use, we might reasonably expect to find an approximate standard. If they then varied we might plausibly infer that the less popular varieties would vary as much or perhaps even more. The percentage of carbolic acid, he said,

was best determined by Koppeschaar's method, which was described in Sutton's "Volumetric Analysis." Ten grammes of the wool were weighed off and placed in a stoppered eylinder containing 1,000 c.c. of water. The whole was allowed to stand for thirty minutes, with occasional shaking. Twenty-five cubic centimetres were then placed in a flask containing a measured excess of standard bromine-water. Excess of KI was then added, and the liberated iodine titrated with $\frac{N}{10}$ this sulphate solution. Phenol, as they were aware,

The bromine left behind in the free condition was then determined by KI, Na₂S₂O₃, and starch-paste. The loss of bromine was determined by calculation, and the equivalent quantity of phenol from this:—

1 molecule phenol = 3 molecules bromine.

The reaction was a very pretty one, and with care an exact one, and he would specially suggest that this quantitative test might be added to the B.P. to estimate the purity of acidum carbolicum, B.P. Boric acid was estimated by washing 10 grammes of the wool, as before, with water: 25 c.c. of this was then evaporated to dryness with 5 c.c. of a strong solution of Na₂CO₃, the latter being previously standardised. The loss of CO₂ was estimated by weight in a modification of the usual apparatus, which was described. The boric acid was thus determined by difference. He proposed using Scherer's volumetric method with $\frac{N}{10}$ thiosulphate

in the estimation of the corrosive wools, but on examination of the two samples he found in one case no mercury (the sample, he had since learned, was about six years old), and in the other much too small a quartity for volumetric determination. Colorimetric testing, using H₂S to produce a dark colour, was then resorted to. The results obtained were as follows:—

1. Carbolic 1.056 per cent. 2. 3. 4. 0.690 0.250 . . 5. 6. 7. 8. 9. 5.08 .. Borie 36.0 .. 21.6 ,, 27.1 .. 15.8 " .. 14-4 11. Corrosive { None .. 1 in 8,000 to 9,000

Uniformity in the colour of the wool was also very desirable. Some borie wools were white, others pink. The latter would perhaps be the better colour. The variations in these samples went to prove that either they were badly prepared or after being made they were badly kept, or possibly there was a combination of these things. Perhaps it would be better to suggest the total abolition of these dressings, and recommend the use of dressings freshly prepared by dipping absorbent cotton into their appropriate medicated solutions at the bedside. A difficulty arose from the fact that the public demanded a dressing ready for use. That these articles—and especially those, like carbolated wool, with volatile medicaments—should be kept in perfectly air-tight vessels went without saying. He hoped his note would have the effect of opening the eyes of those whom the matter most concerned.

The CHAIRMAN, in proposing a vote of thanks, said the results obtained by Mr. Hoseason were startling. With regard to the samples of corrosive-sublimate cotton, was it not possible that the material might possess some power of occluding the medicament and preventing estimation.

cluding the medicament and preventing estimation.

Mr. SPILSBURY suggested the fixing of a standard of strength for medicated cotton. Medical men themselves seemed undecided as to what the strengths of these dressings should be. He considered that the most satisfactory way was to prepare them freshly by means of a suitable spray.

Mr. W. Kirkey said the fault lay not so much in the methods of preparation adopted as in the articles themselves; they were altogether unsatisfactory. Carbolic wool should contain 10 per cent. of carbolic acid, but a very considerable loss took place in the drying; it was not, however, used so much now as formerly. Boric wool was also very unsatisfactory, owing to crystallisation of the acid.

Mr. BLACKBURN thought if boric wool were sent out moist the glycerine would prevent the crystallisation of the acid on the surface of the wool, which must cause an irritation which in skin-affections was particularly objectionable.

Mr. Hoseason, in reply, said the wool sold as sublimate wool had been most carefully tested by several methods, but mercury could not be detected in any form. It would have been comparatively easy to detect it had any been present. If the wool had contained fats, the fluids might not have abstracted the sublimate, but, as a matter of fact, all the samples of medicated wools upon which he had experimented were particularly free from fats.

Salicylic Acid.

At the close of the discussion, Mr. Hoseason exhibited a sample of salicylic acid which had been sold as physiologically pure. It had apparently been manufactured to meet the large demand for this drug, and had been prepared artificially. The sample contained free acetic acid, and the crystals showed a marked difference from those of the acid prepared from oil of wintergreen.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN. NORTH BRITISH BRANCH.

The fourth meeting of the session was held on Wednesday evening, Mr. J. Laidlaw Ewing in the chair. There was a fair attendance. The first paper was on

"A METHOD FOR PRESERVING SPIRITUS ÆTHERIS NITROSI."

By Mr. A. Meldrum.

The paper was read by the Assistant Secretary. With the object of ascertaining the effects of light and heat on the composition of the spirit, and whether the addition of glycerine would have any influence, beneficial or otherwise, on the ehemical changes which took place during the storage of it, the writer had made a number of experiments. A strong spirit of nitrous ether was made by the pharmacopœial process. One part of it was diluted with rectified spirit, as directed in the Pharmacopæia; a second part with rectified spirit and glycerine, so that the finished product contained 5 per cent. by volume of glyeerine; and a third part with rectified spirit and glycerine, so that the finished product contained 10 per cent. of the latter. The various samples were exposed to different temperatures and degrees of light for a month, and then examined for NO gas by Allen's process, for aldehyde by Thresh's method, for free nitrous acid, for free acetic acid, and for total free acidity—the last three having been examined by the method described by Mr. Peter MacEwan, but substituting alcoholic for aqueous solution of soda. To eliminate the influence of light when the effect of temperature was registered, three sets of samples were kept in the dark, one at a temperature averaging 35° F. another at temperature 55° to 60°, and a third at from 70° to 75°. To eliminate the influence of temperature when the results of exposure to light were wanted, one set was kept in the dark, a second was exposed to diffuse daylight, and a third to direct daylight, the temperature in every case having been the same—viz., from 55° to 60°. The results, which were detailed in tabulated form, showed that the effect of increased temperature tended to cause, first, loss of ethyl nitrite; second, slight diminution of the aldehyde; third, increase of free nitrous acid; fourth, increase of acetic acid: and, fifth, consequent increase of total free acidity. Five per cent. of glycerine tended to diminish the loss of ethyl nitrite, and retarded the formation of aldehyde and free acids, while the addition of 10 per cent. prevented, in great measure, the loss of ethyl nitrite, retarded the formation of acetic acid and total acidity, and reduced the percentage of aldehyde and nitrous acid as temperature increased. The effect of light was to cause loss of ethyl nitrite, and increase of nitrous acid. free acetic acid, and total acidity. The addition of glycerine had results similar to those attending its use in temperature tests. On the whole, the writer stated, the addition of glycerine at least in a proportion of 10 per cent. by volume is favourable to the keeping of the spirit without entailing much trouble. The solution of pure

ethyl nitrite in absolute alcohol, although not liable to alteration, does not seem to have come into general use—possibly on account of the price, or, as suggested by Professor Leech, on account of the large proportion of alcohol it contained, which might be undesirable in some cases. On the other hand, the addition of glycerine to sweet spirit of nitre, while tending to preserve it, would not alter its characteristic taste or smell to any appreciable extent, and, if adopted, it might obviate the necessity of introducing the more expensive solution of ethyl nitrite in glycerine and the absolute alcohol. Experiments had also been made to show the effect of stoppering, and the results of badly-fitting stoppers were loss of ethyl nitrite, loss of aldehyde, increase of free nitrous acid, and decrease of acetic acid and total acidity.

Mr. ISAAC W. THOMSON followed with a laboratory note on

ETHYL-NITRITE SOLUTION.

In March, 1890, he had prepared four samples of ethyl nitrite, which were five times the strength of the pharmacopæial spirit of nitrous ether. No. 1 contained 5 per cent. of glycerine, No. 2 contained 10 per cent., while Nos. 3 and 4 were the same as Nos. 1 and 2 respectively, with the addition of an excess of carbonate of potash. These were estimated after dilution to the official strength, and 5 c.c. of each gave the following results: -In March, 1890, all gave 36 volumes NO. In February, 1891, No. 1 gave 32 volumes, No. 2 36, No. 3 30, and No. 4 36. On January 12, 1893, they gave 13, 21, 14, and 21 volumes respectively. He had also made two solutions of ethyl nitrite in absolute alcohol of such a strength that 5 c.c. gave 43 c.c. NO. To one solution he had added 5 per cent., and to the other 10 per cent., of glycerine. In February, 1890, upon being estimated, the first gave 43 volumes; in March, 1890, 42; and in 1893, 42. No. 2 in February, 1890, gave 43 volumes; in March, 1890, 37; and in 1893, 30. He concluded that 10 per cent. of glycerine was a better preservative than 5 per cent. for a solution of ethyl nitrite in rectified spirit, and that the addition of potassium carbonate had no influence at all on its keeping properties. On the other hand, he inferred that 5 per cent. of glycerine was quite sufficient to preserve a solution of ethyl nitrite in absolute alcohol, and an additional test supported this inference.

DISCUSSION.

Mr. D. B. Dott said that, speaking generally, the addition of anything to sweet spirit of nitre would be an objection; but if it could be preserved by so small an addition of glycerine it might be a distinct advantage to add it. It occurred to him at one time to see whether a solution of methyl nitrite would keep any better than ethyl nitrite, and he prepared a solution which he kept in a half-filled bottle. It deteriorated to the extent that from being three times the British Pharmacopæia standard it fell to one-third part of that standard. It had deteriorated in the same way as ethyl nitrite kept under the same conditions.

. Mr. Gibson did not think that the results showed that the addition of glycerine did much good. Besides, one month, or even twelve months, was not sufficiently long to test

glycerine.

Mr. NESBIT thought that the papers showed that glycerine had a wonderful effect in preserving sweet spirit of nitre, and it would be a distinct advantage if they could get a preservative, as the ordinary preparation very soon deteriorated seriously.

Mr. Gorrie said that the papers showed that glycerine had a distinctly preservative effect, although Mr. Thomson's experiments seemed to point to this—that after a time the

process of deterioration would set in.

Mr. Cowie suggested that the lubrication of the stopper had a good deal to do with the keeping of the sweet spirit of nitre.

Mr. Thomson, in replying, mentioned that in 1884 he had samples made of spirit of nitrous ether of the full British Pharmacopoeia strength, and in testing them at intervals he had found that they were always losing strength. The other day he had taken a dose from them, but the result was nil.

Mr. JAMES F. TOCHER, of Peterhead, read

A FURTHER NOTE ON SESAMIN.

He said that in 1891 he had given in a paper read to the Society an introductory notice of a crystalline substance which he had isolated from sesame oil, and to which he gave the name of "sesamin." He now submitted the results of further experiments on the substance. As he had stated in his former paper, sesamin is extracted from sesame oil by means of solvents, such as acetic acid and alcohol. The proportion of solvent may vary according to its nature and strength. The proportion of glacial acetic acid-98-per-cent. he originally used-was seven volumes to ten of sesame oil, but he found sesamin to be quite soluble in 90-per-cent. acetic acid. The sesamin might be obtained from the separated solvent in the crystalline state by two methods, the better of which consisted in evaporating over a water-bath until the solvent had been removed, saponifying the oil present by means of solution of potash, which had no action on sesamin, and setting aside for a few hours until sesamin has deposited. The supernatant fluid is then removed. The sesamin is repeatedly washed with hot water, and recrystallised from alcohol. This method of purification completely gets rid of the impurities. With the sesamin extracted and purified by this mode he performed six combustions: the results showed that the composition of sesamin is expressed by the formula $C_{18}H_1Q_3$. At 20° C.100 grains of alcohol dissolve 0.27 grain sesamin, and 100 grains of boiling alcohol dissolve $8.07\,\mathrm{grains}$ The specific gravity of sesamin was formerly found to be 1.305. The ordinary methods employed to determine the constitution of organic compounds gave no satisfactory results as regards scsamin: the evidence indicated that it did not correspond to any known substance. It had been shown to be devoid of acid or basic properties and, judging from its behaviour with alcoholic potash, nitric acid, &c., it might come under the term "neutral resin" or resin anhydride as used by Dragendorff to describe oxygenated bodies (occurring along with resin acids) which were insoluble in alkalies. As he had pointed out in his previous paper, sesamin assumed a green and afterwards a bright-red colour in contact with nitro-sulphuric acid. A similar coloration was produced on sesame oil by nitro-sulphuric acid. as pointed out by Behrens—a reaction which no other oil exhibited, so that undoubtedly the cause of the coloration was sesamin. Owing to the minute proportion of sesamin present in the oil (.04 to .06 per cent.) he had not been able to extract a sufficient quantity to make a thorough investigation into its constitution.

Mr. Dott said that Mr. Tocher would require to pursue his investigations so as to discover what the exact nature of the body was. At first sight it seemed to belong to the aromatic series, but it was difficult to say exactly. He would like to know if Mr. Tocher had tried the effect of

destructive distillation upon it.

Mr. GIBSON said it would be difficult to ascertain the composition of the substance, but it seemed to be closely allied to oleic acid, or it might be the oxidised product of fatty acids.

Mr. Tocher said, in reply to Mr. Dott, that sesamin occurred in very small quantity, and the amount that he had extracted was insufficient to try the effect of destructive distillation. He had heated a little of it on a piece of platinum foil, and it gave a similar odour to fatty acids. It contained the same number of carbon atoms as oleic acid. The meltingpoint of it was much above that of fatty acids. It was 118° as against 80°.

The CHAIRMAN said that they were greatly indebted to Mr. Tocher for his coming so far to read the paper, and he proposed that they award him a special vote of thanks. This was carried with acclamation.

Mr. Dott read a contribution on

"THE PREPARATION OF OXYGEN."

It was, he said, simply a suggestion to make use of a well-known reaction in a way in which it was probably rarely employed. It often happened that an occasional small stream of oxygen, continued for a short time, was required, in order to burn away graphite or difficulty-combustible carbon. Similarly, it might be desired to prepare oxygen on the lecture-table without the inconvenient and somewhat risky process of heating

potassium chlorate in a glass flask. In such cases the reaction $\mathrm{MnO_2} + \mathrm{H_2O_2} = \mathrm{O_2} + \mathrm{MnO} + \mathrm{H_2O}$ might be employed. The supply of gas might be obtained by using a Woulff's bottle containing the manganese peroxide, a solution of hydrogen peroxide being added by the funnel-tube as required. About 4 grammes $\mathrm{MnO_2}$ were required for 50 c.c. of the "10 volumes" solution of hydrogen peroxide, which together should yield about a litre of gas. It was preferable to use the granular fragments of manganese dioxide, as with the powder the gas was too rapidly evolved. The method was not so expensive as might at first sight appear, as there was no loss of apparatus by heating and fusing, and it had the obvious advantage of delivering the gas in a steady stream.

NEXT MEETING.

The Assistant Secretary intimated additions made to the museum. He then stated, with reference to the next meeting, that (as has already been intimated in our columns) in consequence of a fire which had occurred in his laboratory, destroying his specimens and manuscript, Mr. Stanford would be unable to read the paper he had promised on algin. A paper had, however, been promised by Mr. David Brown, of Messrs. J. F. Macfarlan & Co., on "The Decomposition of Chloroform in Sunlight," and other papers were expected.

The proceedings then terminated.

CAMBRIDGE PHARMACEUTICAL ASSOCIATION.

At a meeting of this Association on February 9, at 9.15 P.M.—Mr. Alderman Deck, President, in the chair—Mr. Elborne, F.C.S., F.L.S., read a paper on "How to Study for the Minor." Mr. Elborne's valuable advice was supplemented by Mr. E. S. Peck, who briefly stated the course he adopted in reading for the Minor, and also gave some personal reminiscences of the examination itself, by Mr. H. D. Fuge, Mr. C. S. Addison, and others. The members present numbered twenty-seven.

SOCIETY OF ARTS.

AT last week's ordinary meeting of this Society Professor W. N. Hartley, F.R.S., read a paper "On Some Points in the Chemical Technology of Drying-oils, Oil Boiling and Bleaching." The lecturer treated the subject historically, and mainly in connection with linseed oil. Going back to the days of Van Eyck, in the fifteenth century, he showed how little was done from that till Chevreul's classic researches in 1850, and these were fully discussed. The composition of linseed oil, the effect of oxidation upon it, the properties of the boiled oil, and the action of various metallic salts upon it were discussed. In speaking of the bleaching of this oil, Professor Hartley pointed out that the colour is due to the presence of xanthophyll, yellow chlorophyll, blue chlorophyll, and erythrophyll, which appear to be combined with the oil. The colour can be removed by exposure to light and air, treatment with sulphuric acid, chlorine. &c. In this connection he and Mr. W. E. B. Blenkinsop (May & Baker, Limited) have devised a process for preparing drying oils of a pale colour. First, by treating linseed oil with 30 per cent. sulphuric acid they produce a bright, clear, and slightly yellowish oil. It is then treated with manganese linoleate, dissolved in a hydrocarbon, which is added in sufficient quantity to the oil to dissolve it. By this treatment, the colouring-matter of the oil forms a compound with the manganese which, while it remains in solution, is very speedily oxidised in contact with air, especially when a current of air of oxygen is blown through. The oxidation destroys the colouring-matter, and the manganese compound is deoxidised; subsequently it undergoes oxidation again, and the products of such oxidation taking place in the oil are acrolein, formic and acetic acids. After, or concurrently with the oxidation of the colouring-matters, the oil is oxidised, and, at a suitable temperature, the oil is bleached, increased in density, and converted into a pale drying-oil. By limiting the amount of the manganese linoleate to that which is capable of just oxidising the colouring-matters, oils may be bleached with very little further oxidation. Excellent dryingoils have been produced by this process, of a very pale colour. The oil has been used for decorative house-painting, for both indoor and outdoor work, on wood and on metal. It has also been used as a coating for ironwork, without the addition of

a pigment. The plant used in its production is the same as that employed in oil-boiling by the usual processes, when a blast of air is used.

A discussion followed the reading of the paper, in which Professors J. M. Thomson (chairman) and Roberts-Austen, Messrs Laurie, Walter Reid, Vaughan, N. Clarke, and others took part.

Trade Hotes.

GRINDLEY & Co. (LIMITED), of North Street. Poplar, E. have now completed the rebuilding of the portion of their works which was destroyed by fire last year. This portion covers two acres of ground, we are told. The company have placed new plant in the factory for the production and purification of petroleum and phenol (disinfecting) compounds,

ADEPS LANE.—Messrs. Thomas Christy & Co. have introduced from Germany, and are now offering through this journal, a wool-fat purified by the North German Woollenyarn Spinning-mills, of Bremen, and patented by them. The fat is of a pale-amber colour, translucent, and develops the characteristic odour of adeps lane when rubbed upon the skin. We find that while it is just within the B.P. limit of acidity, its melting-point is lower—viz., 35°C.—which is probably due to the removal of some of the cholesterin-wax which gives the characteristic stickiness to adeps lane. We are informed that the company who manufacture the wool-fat are the proprietors of large tracts of land in the Argentine Republic, which they have devoted principally to sheep-raising. The wool-fat will be put up in kegs or in tins.

The proprietor of Bromley's gout and rheumatic pills sends us a copy of a letter which he has written to the Grocers' Association, in declining to fill an order for some of those goods. In the course of his letter Mr. Bromley remarks: "Surely there is enough trade in the world in the household necessaries known as groceries, without your members plucking the bread out of chemists' mouths by dealing in goods they are specially educated to dispense. I admire the energy with which grocers cater for business, but I am opposed to grocers selling my goods in any district sufficiently populous to support a pharmacy. I cannot therefore accept your admittedly very advantageous offers (for making money), and must ask you under no circumstances to quote my goods in your list, as I constantly refuse all supplies to grocers, and shall continue to deal only with registered chemists and druggists."

Gazette.

PARTNERSHIP DISSOLVED.

Tait, R. L., and Martin, C., under the style of Tait & Martin, Birmingham, surgeons.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDERS.

Dennis, John Lee, Nottlingham, druggist's manager, formerly chemist and druggist.

Robinson, John Henry, Bolton, physician.

Wilson, William Joseph, Oxford, chemist and oil and colour man.

ADJUEICATIONS.

Dennis, John Lee, Nottingham, druggist's manager, late chemist and druggist.

Robinson, John Henry, Bolton, physician.

ORDER MADE ON APPLICATION FOR DISCHARGE.

Hyams, Hyam, Middlesex Street, Aldgate, E., mineral-water manufacturer—discharge suspended for two years, ending January 12, 1895.

Personalities.

PROFESSOR T. P. ANDERSON STUART, of the University of Sydney, has been appointed medical adviser to the Government of New South Wales. He is "a Minor man."

MR. LEONARD WALTERS, one of the directors of the Chemists' Association (Limited), acting on medical advice, is leaving England for a few months' sojourn on the Riviera.

A HANDSOME black marble dining-room clock, with ornaments, has been presented to Mr. James Baxter, chemist, Grangemouth, by the U.P. Church of that town in recognition of special services rendered.

MR. T. HOWELL WILLIAMS IDRIS was referred to in this column last week as a "pharmaceutical chemist." This was incorrect. He is a chemist and druggist and member of the Pharmaceutical Society. He now signs "T. H. W. Idris."

AT last the Local Government Board have been got to canction the increase of salary to Mr. H. H. Hewett, one of the dispensers to the Holborn Union, but the Chief Clerk (Mr. J. W. Hill), who had fought so vigorously to get the increase, did not live to see the success of his efforts, for he died suddenly on Sunday night last.

THE will of the late Mr. Joseph Paul Brunner, of Liverpool, J.P., chemical-broker, who died on last Christmas Day, has been proved by Mrs. Louise Brunner, the widow of the deceased, by Mr. John Tomlinson Brunner, M.P., brother of the deceased, and by Mr. William C. Barclay, the executors. The net value of the personal estate amounted to 118,0481. 193. 441.

Bankrupten Beports.

Re G. H. SMITH, Barton-on-Humber, Chemist and Druggist, &c.

THE Official Receiver's observations in the above case show that the debtor attributes his insolvency to insufficient capital and depression in trade. Debtor had kept a cashbook, which, however, did not contain a full account of his receipts and payments, and a debtors' ledger, but no other books. He had been in business in Barton many years, commencing without capital. He was aware of his insolvency in August last, but had continued to trade in the hope of improving business. He appeared to have considerably overestimated the value of his stock, machinery, fixtures, furniture, and book-debts, and it was doubtful in the opinion of the Official Receiver if the assets would realise 300l. At his preliminary examination debtor estimated his assets at 2701., and that appeared to be much more like the real amount than the amount given in the statement of affairs, 615l. It was doubtful whether the amount realised for debtor's house and premises, on which were two mortgages amounting to 7001., would be sufficient to cover the mortgages, interest, and expenses. The premises have been closed. Appended is the list of creditors :-

Unsecured.

			£	s.	d.	
Allison, E. & H., Hull	٠.		14	19	2	
Anderson, Mary, Exors, of, Barton			24	0	0	
Bass, Rateliff & Gretton (Limited), Hull			59	19	3	
Coulthard, John, Hull			20	0	0	
Davis & Hewitt, Barton			13	18	9	
Hattersley, C., Calcutta			100	0	0	
Hull Banking Co., Barton-on-Humber			60	3	4	
Overseers of Poor, Barton			13	19	4	
Stoakes, B. M., Hull	• •	••	46	12	1	
Fully Secured.						
Smith, Thomas, Barton Stather			512	8	7	
Partly Secured						

624 0 1

Mason, S. B., Hull

Re Colin Campbell, Dumbarton, Chemist and Dentist.

This debtor was examined before Sheriff Gebbie, at Dumbarton, on February 10. Mr. W. B. Thomson represented the trustee, Mr. George D. Stirling. accountant, Glasgow; and Mr. Cochrane appeared for the bankrupt, who deposed that he commenced business about sixteen years ago, and opened a branch shop in Glasgow Road about seven or eight years ago. His business was a paying one for some time, but four or five years ago it began to fall off, and continued to do so until he found himself in difficulties about eighteen months ago. He continued the business in the hope that matters would improve, but in January last he was compelled to apply for sequestration. His statement showed liabilities 1,188. 5s. 7d., and assets 383l. He accounted for the deficiency by severe competition and reduction in prices, particularly of patent medicines.

Re William Joseph Wilson. 21 Park End Street, Oxford, Chemist and Oil and Colour Man.

This debtor's statement of affairs discloses gross liabilities, 1,1781. 6s. 11d.; expected to rank, 1,1581. 6s. 11d., with assets estimated by the debtor at 617l. 4s. 11d., leaving a deficiency of 5411.2s. The debtor alleges the causes of his failure to be overstocking, pressure by creditors, and bad debts. The Official Receiver states that the receiving order was made on the debtor's own petition. The debtor, who is about 39 years of age, was brought up as a chemist, and has lived in Oxford since 1866. He started on his own account about March, 1881, at Park End Street, Oxford, with a capital of about 50%. The next year he made an assignment, paying his creditors 5s. in the pound. He has kept the usual books. He has done a large business, and estimates his yearly profits at 300t. He says that until September last he was doing well, but that then many of his creditors sued him. When he filed his petition, some five small creditors had obtained judgments and issued executions, and the landlord had distrained for one and three-quarters of a year's rent. This rent is in dispute, being mixed up with cash transactions. The debtor only admits owing one quarter's rent. His deficiency account shows 150l. for legal expenses in five months. Creditors number at present 177, whilst book-debts are due from 128 debtors. Bad debts (in all less than 20) have hardly been one of the causes of his failure.

New Companies.

FERNANDO DRUG CO. (LIMITED).—Capital 2,000/.. in 1/. shares. Objects: To acquire the stock-in-trade, recipes, preparations. &c., of the drug-business now carried on by Fernando, Rhodes & Co., at 3 Victoria Buildings, Pimlico, S.W., and to carry on the business of chemists and druggists (analytic and dispensing); to manufacture, sell, or exchange patent medicines, medical and toilet soaps, &c. The first subscribers (who take one share each) are: F. Schroeder. 68 Mildmay Grove, London, engineer; Marian Fernando, 3 Victoria Buildings, Pimlico; Caroline Rhodes, 16 Sutherland Square, S.E., spinster; Maude R. Schroder, 68 Mildmay Grove, N.; Chas. Bassett, 412 Mansion House Chambers, London, solicitor; Edytha Johnson, 24 Brunswick Square, W.C., journalist; V. A. Rettich, 24 St. Philip's Road, Dalston, engineer. Registered without articles of association.

Tatham & Son (Limited).—Capital 10,000l., in 5l. shares. Objects: To purchase the business, goodwill, stock-in-trade, book-debts, fittings, &c., of J. Tatham & Son, and to carry on, in Settle or elsewhere, the business of grocers. chemists, druggists, drapers, clothiers, warchousemen, and dealers in tea, coffee, snuff, tobacco. patent medicines, oils, and fancy goods. The first subscribers (who take one share each) are:—Thomas Thompson, Settle; H. V. Walker, Settle, accountant; T. Dixon, Settle, bank manager; T. Harger, Settle, merchant; J. L. Brayshaw, Settle, solicitor; C. H. Neill, Settle, grocer's manager; W. A. Stockhouse, Settle, gentleman. Until the first statutory meeting the following arc the directors: J. Lund Brayshaw, C. W. Buck, T. Harger, W. A. Stockhouse, T. Thompson, and C. H. Nevitt (managing). Qualification, 125l. Registered office, Cheapside, Settle, Yorks.

THE SALE OF POISONOUS PROPRIETARY MEDICINES: OUTSIDE OPINIONS.

THE Grocer says: "The decision is one of considerable imimportance to the trade. It is, unfortunately, a triumph for the chemists, not for the groeers. According to this ruling, the latter, as 'unqualified' persons, must not sell articles in which poison enters even as an infinitesimal ingredient. If this decision he accepted as final, our readers will at once perceive what the results are likely to be. They may experience a slight diminution of a not particularly profitable trade, but the public will suffer infinitely greater inconveniences. They will have to go to the chemist for articles which hitherto they have bought from the grocer, and they will have to pay more for them. In many small places, too, where chemists' shops do not abound, buyers will be put to the additional inconvenience of having to travel considerable distances to get what they want; and we do not anticipate that the judgment under notice will be generally popular. It is not the 'groeers who will so much suffer—it is their customers."

The Standard says: "The nature and seope of this decision are worthy of notice. It was admitted that chlorodyne which is a well-known medicine-contains both opium and chloroform, but the defendants urged that, as other and harmless ingredients entered into its composition, it was not a poison within the meaning of the Statute. The Court declined—and rightly declined—to take this view. If this part of the defendants' argument had prevailed, there would have heen ground for maintaining that the most deadly drug in the British Pharmacopeia ceased to be poisonous when it had been slightly diluted with water, and the very misehief against which the Pharmacy Act was directed would thus have been produced. It by no means follows, however, that any compound into the preparation of which a poison enters is within the meaning of the statute; the question in every case will be, whether the article ultimately produced is a poison in substance and in fact. Equally sound and equally satisfactory from the public point of view was the decision of the Court on the plea that chlorodyne was a 'patent' medicine. It was not alleged that chlorodyne had in fact been patented, but there was evidence, and it is notorious, that this and other drugs of a similar character are known, described, and sold as patent medicines, although they are only protected by appropriated medicine-stamps. The extent to which this practice prevails is, in our judgment, no reason why its existence should be legalised or tolerated, but rather the reverse. A patent is one thing, a medicine-stamp is another, and although we do not impute to the persons who describe such drugs as chlorodyne as 'patent' medicines the slightest intention to deceive the public, the term is misleading in fact, and its use ought to he discouraged Nor is there any doubt that, in spite of the express diselaimer which the medicine-stamp contains, purchasers of these so-called 'patent' medicines constantly imagine that they are buying something which has received an official imprimatur."

The St. James's Gazette finds that "the decision, as we said when the case was before the County Court, is generally in accordance with common sense, although it is not quite clear how the taking of an overdose of chlorodyne is to be guarded against by allowing only chemists to sell it."

The Liverpool Mercury, in narrating the circumstances of the case, observes that "the Pharmaey Act, it would seem, is almost as difficult to interpret as the statutes which relate to the sale of margarine and hogs' lard."

The Glasgow Herald says: "The decision although not unexpected, has caused considerable consternation among grocers and patent-medicine vendors, and there is every probability that it will be appealed against right up to the House of Lords. The difficulties that 'the trade' foresee are practically two. In the first place it is said, if every preparation containing poison is a 'poison' under the Pharmacy Aet an enormous number of articles now sold by grocers will heeome capable of being sold only hy chemists, who not only have already a monopoly of ordinary drugs, but sometimes encroaeh on grocers' business. It is doubtful, however, whether the decision of the Court involves this

result, and the proportion that the poisonous hear to the non-poisonous ingredients in a compound will almost certainly he taken account of. It is hard to be supposed that almonds will be held to fall within the category of 'poisons' because they contain infinitesimal traces of prussic acid. The second difficulty is a more serious one. The proprietary drugs now vended under the name of 'patent medicines' will in all likelihood have to drop that specious and deceptive title on pain of prosecution under the 105th section of the Patents Act, 1883.

The Manchester Guardian says if "the decision is upheld by the Court of Appeal an interesting question will be raised—namely, whether the vending of proprietary as patent medicines can be punished under the 105th section of the Patents Act, 1883. The development of this case is awaited with much interest in legal and commercial circles." [This is not a very wise observation. The offence against the Patents Act could only arise if a particular medicine were described as patent when it had not been patented.]

The Yorkshire Evening Post regards the decision as "a most important one, as it refutes completely the argument that when other and harmless ingredients besides poison enter into the composition of a patent medicine it does not constitute a poison within the meaning of the statute. The point for which the Pharmaceutical Society are fighting so hard is one of vast importance both to chemists and to the general public. The war is by no means over, but for the public safety it is perhaps more satisfactory that in this event of the campaign victory should have rested with the Society."

MARRIAGES.

CROOKES—WILLIAMS.—On February 9, at St. Peter's Church, Bayswater, by the Rev. Corbett M. Moore, the Viear, assisted by the Rev. J. Herbert W. Kane, Bernard Humphrey, son of William Crookes, 7 Kensington Park Gardens, W., to Edith, daughter of Robert Parry Williams, of Liverpool.

DOBLE—DENNIS.—On February 8, at the Tavistock Congregational Church, by the Rev. C. J. Palmer, of Devonport, Richard Dennis, eldest son of H. T. Doble, M.P.S., Brook Street, to Leila Mary, second daughter of John Dennis. Endsleigh Terrace, Duhlin.

Doug—Moore.—At Balmoral Hotel, Belfast, on February 8, by the Rev.W. J. Christie, John Lyall Doig, chemist and druggist, cldest son of Bailie Doig, chemist, Dundee, to Harriette Louise. second daughter of John Moore, of Moore View, Crumlin, co. Antrim, Ireland.

GUNNER—TOMLINSON.—On February 14, at St. Paul's, Kersal, Manchester, by the Rev. Prebendary Macdonald, Rural Dean, assisted by the Revs. H. J. Meres and R. Blake-Kent, George Woodroffe Gunner, Alton, Hants, to Helen Adeline, only daughter of Thomas Tomlinson, M.P.S., Yew Bank, Cliff Point, Broughton.

STRACHAN—DURNO.—At Mann's Hotel, Aberdeen, on February 7, by the Rev. A. Leslie, Folla Rule, assisted by the Rev. J. Wiseman, Buxburn, Alexander Leslie Strachan, chemist (Davidson & Kay), to Mary Green, youngest daughter of the late George Durno, Westerton of Folla, Rothienorman.

DEATHS.

Hollis.—At Friar Gate, Derby, on February 15. Thomas Hollis, chemist and druggist. The deceased, who was very well known in Derby, was upwards of 70 years old, and the immediate cause of his death was a chill.

LAWLOR.—On January 4. at Liverpool, Sydney, New South Wales, James Patrick Lawlor, L.P.S.I., dispensing officer Liverpool Dispensary, N.S.W., and formerly of Messrs. Hayes & Co., chemists, Grafton Street, Dublin.

McInnes.—At 448 Cathcart Road, Glasgow, on Fiebruary 7, Archibald S. McInnes, ehemist and druggist, late of Alford.

MELVIN.—On January 14, James Melvin, chemist and druggist, Bristol. Aged 50.

SCAWIN.—On December 31, 1892, Thomas Seawin, chemist and druggist, Durham.



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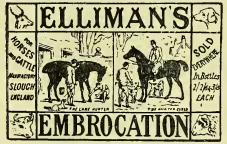
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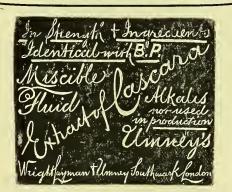
See pages 72 and 73 of the Winter Number, January 28, 1893.

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See first page, facing inside of cover, of Feb. 4 issue, for latest particulars.

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See Winter Issue of The CHEMIST AND DRUGGIST, Jan 28, 1893.

Editorial Comments.

THE SALE OF POISONOUS PROPRIETARY MEDICINES.

WE have now a High Court decision on the long doubtful "patent-medicine" question. The judgment of Justices Lawrance and Collins in the case of the Pharmaceutical Society v. Piper & Co. establishes, for the present, at all events, the opinion expressed first by Mr. Alpe, the Somerset House lawyer, next by Mr. Braxton Hicks, the Coroner, and pushed vigorously to an issue by Mr. Ernest Hart, that the exemption provided in the 16th section of the Pharmacy Act, in regard to the "making and dealing in patent medicines," did not permit persons not registered as ehemists and druggists to become vendors of compounds containing poisons in appreciable quantities, even though these should be stamped and should come within the popular designation of "patent medicines." Mr. Lushington, the Bow Street Magistrate, had no hesitation in coming to this conclusion. Judge Bacon, at the Bloomsbury County Court, regarded this view as an absolute eertainty; and if the two Judges of the Queen's Bench were more reluetant and less confident than the lesser legal luminaries we have named, this in no degree weakens the effect of their opinion when it was

arrived at. The attentive reader of our reports of the case presented to the Queen's Bench Division will discover that the Judges had not arrived at a clear apprehension of the exact point before them when counsel on both sides had finished their arguments. That they were accurately informed as to the main points of the question raised is evidenced by their judgments; but it was quite clear that on one or two minor points they had been led or had wandered into views which a closer reading of the statute before them might have corrected. Mr. Poland, for instance, told the Court that the necessity for labelling a medicine "Poison," and the exclusive right of chemists to sell such a medicine, were both dependent upon their judgment on the point before them. This is not the case. A truly patent or patented medicine can be sold by unregistered persons, even though it contain poison; but the labelling requirements of section 17 are not avoided on the ground that the medicine has been patented. Mr. Bonsey conveyed the erroneous impression to the Court that the Pharmacy Act restricts to chemists the right of compounding physicians' prescriptions. Another of Mr. Bonsey's arguments, and one which seemed to considerably trouble Mr. Justice Collins, was that if the Court decided against his clients, no proprietary medicine containing poison could be sold even by a chemist, except with the formalities of entering every sale in the poisons-book, and he argued laboriously that it would be necessary in such cases to record the actual quantity of the poisonous ingredient sold in every instance. This, he contended, would destroy the trade in such articles altogether. Mr. Justice Collins held that an entry showing the number of bottles of medicine sold would sufficiently satisfy the regulations. But he would have come to his decision less reluctantly if he could have emancipated his mind from the difficulty with which learned counsel confronted him, by the discovery that the entry of the sale of the most popular poisons is not required by the Act at all.

The arguments which the defendants advanced in the High Court were exactly the same as those urged in the County Court on their behalf. Mr. Bonsey raised two lines of defence-first, that an article was not a poison, or a preparation of a poison, merely because it contained a scheduled poison; and, secondly, if it were a poison, the article specifically attacked was a patent medicine within the meaning of the exemption clause. Neither of these arguments obtained much respect from Judge Bacon; but in the High Court, both seemed to make a considerable impression. The contention that the Government stamp was sufficient to bring a medicine into the category of patent medicines was the first to fall, the Act 52 George III. c. 150, in which various classes of medicines—those patented being one of these classes—are described as liable to the duty, effectually disposing of that argument. The argument that the presence of a small portion of a scheduled poison in any compound does not necessarily render that compound liable to be treated as the poison itself is a much more subtle argument, and commanded more attention. Mr. Bonsey urged that if the view of the plaintiffs were correct, fly-papers containing arsenic, soaps containing one or other poison, and even tobacco containing a poisonous vegetable alkaloid, must be included as poisons, which chemists only could sell, and then only after entry in the poisons-book. He supported his argument by reference to the addition to the poisons-schedule of vermin-killers when they contained a scheduled poison. "If," he said, "the plaintiffs' present contention is correct, what was the need of making such an addition to the schedule?"

It is quite obvious that up to a certain point there is much force in those arguments; but Mr. Justice Collins

replied to them by a very ingenious reference to that part of the 17th section which allows chemists or doctors to dispense medicine containing poison under circumstances without attaching the poison-label. This, he said, showed that the Legislature evidently contemplated the liability of compounds containing poisons to be regarded as the poisons themselves, and, holding the view that the Act had special reference to the sale of drugs, he had no difficulty in coming to the conclusion that the prohibition must apply to a case like that before the Court. The allegation that this enforcement of the Act would interfere with trade he considered to be of less importance than the alternative of leaving the handling of dangerous instruments in the hands of utterly untrained persons.

We have not yet heard whether the defendants will take the case to the Court of Appeal. They were allowed a fortnight from the date of judgment to decide. If they do not, the right of chemists to the exclusive sale of proprietary medicines containing poisons may be regarded as finally established.

IODOFORM AS AN ANTISEPTIC.

Iodoform is not regarded as an antiseptic in the ordinary acceptance of the term-i.e., it does not retard the growth of bacteria-but Sir Joseph Lister points out that it is of the highest value as an antiseptic, and has a powerful antiseptic influence upon wounds. This apparent contradiction is explained by Behring, who says that iodoform produces its beneficial effects, not by acting directly upon bacteria, but by inducing chemical changes in their toxic products. He has ascertained that some of these toxines are altered chemically by iodoform and at the same time rendered harmless. The notion that it is the bacteria which do the damage is erroneous: it is the products of bacteria which physicians and surgeons are now endeavouring to get at and to counteract in many cases. Dr. W. D. Miller, the Berlin dentist, has been investigating the utility of iodoform in the treatment of diseased conditions of the teeth, and he has been able to prove that while the drug has directly only a feeble retarding influence upon bacteria, it has no devitalising action upon the tooth-pulp, exerts a very beneficial action upon wounds, to which it can be freely applied, and has indirectly a retarding action upon the development of bacteria in that it deprives them of the nourishment necessary to their proliferation. Nevertheless he thinks that for dental purposes iodoform is not to be recommended.

THYROID EXTRACT.

Mr. Edmund White, B.Sc., pharmaceutist to St. Thomas's Hospital, informs the British Medical Journal that he has succeeded in preparing the active principle of the thyroid. whatever it may be, in a dry state. In his process the glands were first exhausted with a mixture of equal parts of glycerine and water. The filtered fluid was then acidulated with phosphoric acid, and calcium hydrate added until an alkaline reaction was obtained. The precipitate was filtered out as rapidly as possible, washed, and dried over sulphuric acid without heat. The powder obtained in this manner has been employed successfully by Dr. Davies in the treatment of cases of myxcedema. The dose given was 3 grains, corresponding to \frac{1}{8} of a gland, and of this about 1 grain was organic matter. Recently Mr. White has been making 3 grains equivalent to f of a gland. He is carrying his investigation further, with a view to determining whether the active principle is a ferment or not.

CREOSOTAL.

This is the name which Professor Brisonnet, of the School of Medicine, Tours, gives to the body obtained by combination of carbonic acid and creosote (*Repert. de Pharm.*) The product

is likely to be of considerable therapeutic value, for it is a neutral, bland, sweet oily liquid, without odour, non-irritating to the mucous membrane, and is readily borne by the stomach. It is made by acting upon sodium-creosotc with chloro-carbonic acid, COCl2, in alkaline solution. The creosotal separates and sinks to the bottom of the mixture. It is collected, washed with a weak cold solution of alkali, and any adhering water is driven off by a gentle heat. The specific gravity of the purified creosotal is 1.165; it is insoluble in water, glycerine, and dilute alcohol, but soluble in all proportions of strong alcohol, ether, chloroform, and benzine. A hundred parts of it are equal to 90 of creosote, yet it has been given in doses of 10, 15, and 20 grammes per day without disturbing digestion. In the intestines it is resolved into its components, creosote and carbonic acid, and creosote is found in the urine half-an-hour after a dose has been taken. Its use is indicated in tuberculosis and other diseases for which creosote is prescribed.

POST-CARD COMPETITIONS.

The conclusion of our anecdote competition and the valentine competition are both ready for publication, but the extent of our Legal Reports this week compels us to hold back this more frivolous literature.

A PROTESTING PROFESSOR.

The Council of the Institute of Chemistry is so determined to belittle the value of the letters "F.C.S." that at a recent meeting it was resolved "That in future all letters indicating membership of any society, except the Royal Society (London), be omitted in the register from all names of members of the Institute." This was an amendment of a motion to omit the letters "F.C.S." In consequence of this resolution, Professor T. E. Thorpe, of the Royal College of Science, Treasurer of the Chemical Society, has resigned his position on the Council of the Institute and his membership, as he considers the resolution unfriendly to the Society. To that he adds, "There is no greater inherent value or property in the letters F.I.C. than in those of F.C.S. Whatever value may be associated with those letters is a matter of individual appraisement, depending upon the estimation by the valuer of the worth and dignity of the particular Society."

"VETERINARY CHEMIST."

The following amounts have been promised towards a guarantee fund for the proper defence in the High Court of the right of chemists to use the description "veterinary chemist," challenged by the Royal College of Veterinary Surgeons. Other chemists interested are requested to assist. If the full amount guaranteed should not be required only a pro rata call will be made;—

			£	8.	d.				£	s.	d.
THE CHEMIST	& DR	UGGIST	10	10	0	J. W.		 	1	1	0
X. Y. Z			10	10	0	M. C. S.		 	1	1	0
R. H. Groves			5	0	0	W. E. M.		 	1	1	0
F. & Sons			3	3	0	W. F.	٠,	 	1	1	0
B. & S			2	2	0	G. D.		 	1	0	0
B. & Son			2	2	0	н. в.		 ٠.	0	10	6
Е. М			2	2	0	H. W. G.	м.	 	0	10	6
J. W			2	2	0	J. B.		 	0	10	6
L. J. H			2	0	0	W. M.		 	0	10	6
A. O			1	1	0	W. W.		 	0	10	6
С. В			1	1	0	w.w.		 	0	10	6
C. B. S			1	1	0	C. S. R.		 	. 0	10	0
Н. & Со			1	1	0	F. R. C.		 	0	10	0
J. T. C			1	1	0						

KNOCKED OUT.—Enterprising Druggist: "Here's a card, madam. Each time you buy something I'll punch it. When two dollars are punched you gct five soda-watertickets free." Madam: "That's a fine idea. I'll take two dollars' worth of postage-stamps now."—Judge.

DEEDS OF ARRANGEMENT.

Hoffe, Philip, trading as Hoffe & Co., Ballina, Ircland, pharmaceutical chemist. Dated January 31: filed February 2. Unsecured liabilities, 960%; estimated net assets, 272% (secured creditors, 120%). Creditors over 10%:—

				£ 3. d.
Alexander & Co., Dublin				 58 11 2
				 16 3 0
		٠		 15 3 7
Ersikine, Joseph, Ballina				 18 1 6
Fletcher & Co., London	٠.			 32 6 6
Grecuing & Co., Dublin				 20 0 0
Lecky, Joseph, Dublin				 95 14 10
Mathews, John, & Co., Liverpo	ol			 32 3 7
Roberts & Co., Liverpool				 43 18 0
Robinson, Mrs. Julia, Dublin				 30 0 0
Thacker & Hoffe, Dublin				 592 0 0
Total estimate	ed	debts,	1,0807.	

Martin, Joseph Henderson, Warboys, medical practitiouer. Trustee: Robert W. King, St. 1ves (auctioneer). Dated February 1; filed February 3-Unsecured liabilities, 6311. 11s. 5d.; estimated net assets, 3651.; creditors fully secured, 2101. The following are scheduled as creditors:—

			£ s. d.
Aural, H. S., Warboys	 		 16 10 0
Broughton, W., Warboys	 		 23 0 0
Bryant & Bryant, St. 1ves	 	٠.	 51 4 4
Cave, Thos., London	 		 157 10 0
Curtis, E., Warboys	 		 21 0 8
Day, H. G., Redcar	 		 50 10 0.
Ferris & Co., Bristol	 		 42 10 0
Fox, C. J., Swellington	 		 102 0 0°
· Hewlett & Son, London	 		 21 3 11
Martin, T. H., Glasgow	 		 50 10 . 0
Noble, E., Warboys	 		 18 0 0
Onyett, W. H., Warboys	 		 11 8 11
Pearson, H. H., Richmond	 		 50 10 O
Pearson, S. J., Richmond	 		 50 10 0
Rose, W., Ramsey	 		 15 10 O
Sauderson, F., Richmond	 		 52 3 6.
Ulph & Ruston, St. 1ves	 		 13 6 3

Goodall, John (trading as Central Drug Company), 26 Tontine Street, and 43 St. John Street, Hanley, chemist and druggist. Trustee, Samue's Painton, Hanley, auctioneer. Dated February 7: filed February 13. Unsecured liabilities, 359l. 11s. 10d.: estimated net assets, 174l. 14s. 8d.: preferential creditors, 5l. 5s. 4d. The following are scheduled as creditors:—.

,	•			£	8.	d.	
Ayrton & Saudcers, Liverpool				18	2	6	
Barclay & Sons (Limited), London				13	18	0	
Birchall, —, Liverpool				10	10	0	
Clements, —, Bristol				15	2	4	
Durant, J., Bristol				10	7	0	
Kemp & Sons, Horncastle				19	0	Û	
Langton, Hicks & Co., London				21	12	1	
Oxen, D. H., Newcastle				66	0	0.	
Sanger, J., & Sons, London			٠.	12	10	3	
Sntton & Co., Loudon				11	14	0	
Thomas Hodgkinson, Prestons & K	ing,	London		10	10	0	
Wyleys (Limited), Coventry				11	18	0	

AGATHIN is one of the latest new remedies. Chemically it is salicyl-alphamethylphenyl hydrazone—

C6H4.OH.CH.No.CH3.C6H5.

It is a crystalline powder, almost white, a faint green shade being perceptible. The powder is insoluble in cold water, and, as it melts at 74° C., with hot water the crystals only change to oily drops. It will be useless, therefore, for chemists to attempt to make agathin into mixtures, and as the powder per se does not mix readily with water it will be advisable to rub it up with its own weight of sugar when dividing intopowders. Therapeutically, agathin is used for treating certain neuralgias, rheumatism, and sciatica, especially the last. It is given in doses of 4 to 8 grains thrice daily, and, curiously, 3j. to 5iss, must be given before the effect is produced. The remedy is manufactured by Meister, Lucius & Brüning, and is distributed in this country by the agents, Messrs, Burroughs, Wellcome & Co.

Legal Reports.

PHARMACEUTICAL SOCIETY v. PIPER & Co.

THE hearing of this case, which was an appeal by the defendants, who are grocers, carring on business at Pimlico, from the decision of the County Court Judge at Bloomsbury, was continued on Friday in the Queen's Bench Division of the High Court, before Justices Lawrance and Henn Collins, sitting as a Divisional Court. The action was one brought by the Pharmaceutical Society to recover penalties from the defendants for having kept a shop for retailing and dispensing an article ealled "chlorodyne," which contained, as ingredients, of morphine and chloroform, contrary to the provisions of the Pharmacy Act of 1868. The Act provides that no person not duly qualified can sell any of the poisons enumerated in the schedule of the Act, which includes preparations of opium and chloroform, and the question was whether a compound which contained as an ingredient a small portion of any one of the poisons enumerated could be sold otherwise than by a chemist or druggist or other person duly qualified. The County Court Judge held that chlorodyne was a poison within the meaning of the Act, and gave judgment for the plaintiffs. Mr. Bonsey appeared for the defendants in support of the appeal; and Mr. Poland, Q.C., and Mr. Grey represented the Pharmaceutical Society. The first part of the hearing of the appeal was reported last week.

Mr. Poland, in continuing his argument, said that when the Court adjourned on Wednesday he had been dealing with the Act up to the 16th section. It was desirable to point out that schedule A to the Act, parts 1 and 2, did not profess to deal with all poisons. For instance, it did not deal with white-lead, putty, and a number of other poisons which were not generally used for injurious purposes, such as suicide or murder, and which were not likely to cause death by accident. Putty and such things were left entirely out of the Act, but there were included in the Act such serious and deadly poisons as arsenic and prussic acid, and other poisons, such as ergot, which might be used for improper purposes. The poisons dealt with in the second part of the schedule were less dangerous, but still were frequently used with injurious effect. Therefore the Legislature had especially referred to these two classes of poisons, and had given to the Pharmaceutical Society power to add other poisons to the schedule. He had also pointed out that chlorodyne came within the schedule, by reason of the fact that it contained among its ingredients morphine and ehloroform. Chlorodyne had been declared to be a poison by Mr. Lushington, the Magistrate at the Bow Street Police Court, but if his learned friend was right in his contention it ought no longer to be so regarded. The decision he had alluded to was in connection with a Treasury prosecution. It was there ascertained that ehlorodyne might be a poison both as regarded infants and adults, and the vendors of the medicine, in compliance with the Magistrate's decision, had altered the labels on the bottles, and had put upon them the word "poison," so as to comply with the statute.

Mr. Justice Collins: That depends on the authority of a police magistrate, but I do not see how it binds us. I understand you to say that if you are wrong on the point before us, the proprietor is not bound to put the word "poison" on the label?

Mr. Poland said that was so, therefore the question was of the utmost public importance. He would point out that so far as the Magistrate did decide there was no appeal and the learned County Court Judge had taken the same view. Therefore he contended that chlorodyne eame within the schedule of the Act. Having dealt with the sections of the Act relating to the sale of poisons by unqualified persons, the learned counsel went on to quote the amendment of section 17 in the Act of 32 and 33 Victoria, chap. 117, section 3, which stated that

Nothing contained in section 17 of the said recited Act shall apply to any medicine supplied by a legally qualified medical practitioner to his patient or dispensed by any person registered under the said Act, provided such medicine be distinctly labelled with the name and address of the seller,

and the ingredients thereof be entered, with the name of the person to whom it is sold or delivered, in a book to be kept by the seller for that purpose.

Mr. Justice Collins: You have been reading from the amending Act. I have followed you from section 17 of the principal Act. The only difference appears to be in the words "medical practitioner."

Mr. Poland: Yes; medical practitioner instead of apothe-

Mr. Justice Collins: What does it mean (in the 17th section) when it says the medicine is to be labelled "in the manner aforesaid"? Does that mean that the word "poison" is to be on the label?

Mr. Poland (after consultation with Mr. Flux): No; it means it is to be "distinctly labelled."

Mr. Justice Collins: That hardly answers my question. Is it or is it not the law that medicines into which poisons enter as ingredients must be labelled with the word "poison"?

Mr. Poland: Yes, if they do not come within any of the exceptions. It seems to come to this. If the Act had stopped at section 15, all medicines containing poison would have been included. It was seen by the Legislature that almost all the poisons might be used as medicine, and therefore that there must be some different treatment of these to that prescribed in the previous sections of the Act. Provision was therefore made as regards labelling medicines dispensed, but reading section 17 with section 3 of the subsequent Act it is clear that a poison is not less a poison because it may also be combined with other ingredients and used for curative purposes.

Mr. Justice Collins: I admit that those sections form a strong argument in your favour. They seem to assume that the Act has a wider sweep than the schedule indicates.

Mr. Poland: We have got here in this chlorodyne two of the poisons, chloroform and morphine, but because they are mixed with treacle, capsicum, and several other things, we are asked to say that they cease to be poisons.

Mr. Justice Collins: There is no doubt that poison is one

of the ingredients; that is found on the facts.

Mr. Poland: This is certainly a very important public question, because, if I am wrong, they can take off the word "poison" and sell it as they did before. Then as to the other part of the case, is this article within the meaning of the statute a patent medicine? I venture to submit with great confidence that it is not. The Stamp Act of 52 Geo. III. chap. 150, dealt with the question of proprietary and patent medicines, and in the schedule to the Act there were mentioned a large number of articles, from Adams's solvent to Zimmerman's stimulating fluid. These were medicines which were specially named as liable to be stamped. Then the Act goes on to say, "And all other pills, powders, &c." The learned counsel here read the well-known description of medicines liable to stamp-duty, to show that medicines for which patents had been granted were only one of several classes liable to stamp-duty, and that a distinction was clearly drawn between these and proprietary medicines, nostrums, specifics, &c. He proceeded.] The Legislature, as I submit, must have used language in its ordinary sense, and did not intend to include in the words "patent medicines" medicines in respect of which patents under the Great Seal had not been granted, but which were merely proprietary articles. My friend asks the Court to say that the term "patent medicines" is a loose general term, and is intended to include such articles as "Dr. Collis Browne's Chlorodyne," but that would be placing an altogether wrong construction upon the intention of the Legislature.

Mr. Justice Collins: There is a great distinction between a patent and a proprietary medicine, because the ingredients of the former are ascertained, and that may be a protection

to the public.

Mr. Poland: Here are articles recognised by the Act of Parliament which come within the exemption as patent medicines, and when the exemptions are referred to, plain ordinary English is made use of. I submit that I have made out my case on both points. First, I say that this chlorodyne is a poison within the meaning of the Act; and, secondly, that it does not come within the exemptions as being a patent medicine. My learned friend says that this is an attempt by the Pharmaceutical Society to prevent the sale of this medicine in the country and in villages, and so

forth. This is not so. What they are doing is the performance of a public duty in enforcing the salutary provisions of the Act of Parliament. I say that the learned Judge and the Stipendiary Magistrate were both right, and that this

appeal ought to be dismissed.

Mr. Bonsey said that before dealing with his learned friend's argument on the 17th section of the Act he should like to make perfectly clear the contention of the Pharmaceutical Society. They contended that they had only to show that one of the ingredients in any compound, no matter what the quantity of that ingredient was, was a poison within the meaning of the schedule to the Act to make it necessary to have the compound labelled "Poison." Upon that there was another question which might very well arise—as to whether the compound, by the addition of a poison, was, in fact, in itself a poison. There was a great distinction between the two, and it was in respect of that distinction that both the difficulty and the importance of this case arose. The plaint itself did not allege, as his friend Mr. Poland rather suggested, that chlorodyne could be said to be a poison, but it alleged that the defendants had incurred a penalty for "keeping open shop for the retailing, dispensing, or compounding of an article called chlorodyne, which contained poison—to wit, opium, or a preparation of opium, and chloroform." It had never been suggested, either by the plaint or by the evidence before the County Court Judge, that the compound itself-viz., ehlorodyne-was a poison, but the plaintiffs contented themselves with showing that one of the ingredients was a poison. For the purpose of determining this case, it was not a question of whether there was 2 grains of opium or chloroform, or even the hundredth part of a grain, in a bottle, but whether the whole compound was a poison within the meaning of the Act. Coming to his friend's point on the 17th section, he frankly admitted that that section created a difficulty. In the absence of that section, there would be no foundation whatever for his friend's argument.

Mr. Justice Collins: Suppose a person uncontrolled by legislation is about to make a mixture, and purposes to put into it as an ingredient a poison in such an infinitesimal quantity as not to hurt, may he not, being an entirely unskilled person, put into it ten times as much as he intended? What security have the public in such a case as

Mr. Bonsey: A grocer cannot compound. Before the Pharmacy Act was passed, anyone could call himself a druggist and dispense medicines, but the Pharmacy Act put a stop to that, and only registered chemists and druggists and medical practitioners can, in the ordinary sense of the term, make up prescriptions and sell medicines. The Pharmacy Act affords ample protection to the public in this respect.

Mr. Justice Collins: I understand you to say that if a compound is produced into which an infinitesimal quantity of poison enters as an ingredient, it does not come within the Act at all, and that therefore anyone is at liberty to

sell it?

Mr. Bonsey: I don't think it was the intention of the Act to include such preparations, because, if that was so, numberless things would have to be labelled "Poison" which are in daily use. For instance, in many soaps, I believe, there are substances which in themselves are poisons. If my friend's contention is right, they would have to be labelled "Poison," and the restrictions on the sale of poisons would not be confined to medicines at all. The submission of the plaintiffs, that they have merely to show that one of the ingredients is a poison, reduces the thing to an absurdity. Take, as I have said, the ease of a soap which contained an infinitesimal quantity of some poison. If the contention raised is correct, that could only be sold by a. chemist or druggist, who must enter into a book the name and address of the purchaser, the date of the sale, and the particulars and quantity of the article sold. How could that be done in such cases? It is perfectly impossible that the provisions of section 17 could be complied with, if that be the meaning of the Act. A chemist does not know any more than a grocer what quantity of a particular ingredient is in a piece of soap or a compound used as medicine. He only knows what the ingredients are when he makes up the ingredients. The public are no more protected-and my friend lays great stress upon the safety of the public-by a

chemist selling a particular thing than by a grocer, because a chemist does not know the ingredients, and he cannot comply with section 17.

Mr. Justice Collins: But, assuming that the thing falls within the Act, might be not enter it as so many bottles of the article? He is required to enter the name, quantity, &c.,

of the "article."

Mr. Bonsey: I think it is evidently the poison he is to name, and if he cannot do this he commits an offence under section 17 if he sell it. Therefore it comes to this—that he could not sell it at all. If my friend is right, then no article which contains any portion, however small, of poison can be sold either by a chemist or by anyone else without committing an offence under the Act, unless he makes the article himself, because he does not and cannot know the quantity of any particular ingredient in it. That, I think, shows that the Act could never have been intended to apply in such cases. This has been a difficulty ever since the Act was passed. Many years ago it was brought prominently to the notice of the Privy Council by the Pharmaceutical Society, and the Privy Council laid down a rule for the guidance of the Society which has been published and acted upon for a number of years. [Reading from page 91 of the " Pharmacy and Poison Laws" Mr. Bonsey quoted from the opinion expressed by the Privy Council to the effect that the Act was intended to include compounds which in themselves were deadly and dangerous, but not compounds which in themselves were perfectly harmless, although into their composition might enter a poison or the preparation of a poison which taken alone would be dangerous or deadly. Questions of factmust be dealt with as they arose.]

Mr. Justice Collins: I cannot see that that rule will be

binding upon us.

Mr. Bonsey: I only wanted to show that this difficulty has been in existence since the Pharmacy Act was first passed.

Mr. Justice Collins: I think you have made us sufficiently aware that there is a difficulty.

Mr. Poland: I don't mind admitting that if a mere grain of prussic acid was put, say, into 60,000 gallons of beer it

would cease to be a poison.

Mr. Bonscy: If my friend says that he must be in a difficulty, for it is not shown that chlorodyne as such is a poison. There is no evidence of it. He has not given evidence to show that if a person takes a dose according to the directions or in small quantities, it would act fatally. If he had shown that a person had been known to be killed by taking 10 or 30 drops of the mixture, that would be evidence to show that the compound itself was a poison.

Mr. Justice Collins: I do not see any definition of poison

given in the Act.

Mr. Bonsey: The common definition of a poison is something which is dangerous to life if taken in small quantities. I do not think we can get nearer than that. There must be a limit somewhere, because a person could be killed by almost anything if he took an excessive quantity. I quite admit that in the 17th section there are words which give colour to my friend's contention, but the construction he has put upon the Act is, I venture to submit, a perfectly unreasonable one, and is a straining of the intention of the Legislature. With regard to the question whether or not chlorodyne can be considered as a patent medicine, if Mr. Poland's contention is correct, it is all the more reasonable to suppose that : this term "patent medicines" did include proprietary medicines, because otherwise no one could sell a proprietary medicine with safety and without being subject to penaltics under the Act, because if it turned out afterwards there was any small portion of poison in it he would be liable to a prosecution. With regard to the statute of George III., that was only one of a number of statutes altering or repealing one another, and in no one case had his learned friend shown that the words "patent medicines" were intended to be used in the strict sense of the term. Between 1812 and 1868 an enormous increase in the number of proprietary medicines had taken place, and the words "patent medicines" had then acquired, as evidenced before the County Court Judge, a much wider and more popular meaning. This, therefore, is one of the cases where we ought to give to the statute not the literal but the popular meaning of the word—the popular meaning at the time the Act was passed and one consistent with a reasonable interpretation of it.

Mr. Justice Collins: What was the penalty imposed for—

Mr. Bonsey: For keeping open shop for retailing, dispensing or compounding an article called chlorodyne, which contained poison, contrary to the provisions of the Pharmacy Act, 1868.

JUDGMEMT.

Mr. Justice Lawrance, in giving judgment, said : Speaking for myself, I may say that I have had considerable doubt during the course of this ease, and I am bound to say that the whole of my doubts are not entirely removed. However, having given the best consideration I can to the question which we have to decide-viz., whether any person who is not a chemist can sell a proprietary medicine containing poison—I come, not altogether willingly, to the conclusion that such a person cannot. The statute to which our attention has been ealled starts by declaring that "whereas it is expedient for the safety of the public that persons keeping open shop for the retailing, dispensing, and compounding poisons, and persons known as ehemists and druggists, should possess a competent practical knowledge of their business"; and then it goes on to say that all persons not engaged in such business should, before commencing, be duly examined as to their knowledge. Then, in section 1, it says, "From and after December 31, 1868, it shall be unlawful for any person to sell and keep open shop for retailing, dispensing, or compounding poisons, or to assume or use the title of ehemist and druggist." I need not go further. The question here is whether the appellant in this case was such a person—viz., a person who, not being a chemist, was retailing—because that is what he is doing here—a poison. Our attention has been ealled to several of the sections of the statute, and the important one seems to be the one under which the defendant was convictedthat was the 15th section, which says, "From and after December 31, 1868, any person who shall sell or keep an open shop for retailing, dispensing, or compounding poisons"-I leave out the other words-" or shall take, use, or exhibit the name or title of chemist and druggist" (he did not do that), "not being a duly registered pharmaceutical chemist or chemist and druggist," and so on, "or shall fail to conform with any regulations as to keeping or selling poisons made in pursuance of this Aet," shall be liable to certain penalties. These are the penalties sued for in the County Court, and, as I understand—we have the notes of the learned County Court Judge before us, but he does not give us any information upon it-the learned Judge found that defendant was liable to these penalties. That is his decision. Now, the only exception with regard to persons-I will wait until I come to section 17 to deal with that-but the only exception to persons selling or retailing poisons is contained in section 16, which says, "Nothing hereinbefore contained shall extend to or interfere with the business of any legally qualified practitioner or of any member of the Royal College of Veterinary Surgeons of Great Britain, nor with the making or dealing in patent medicines, nor with the business of wholesale dealers," and other persons mentioned there. What is argued here is that, whatever this may be, whether this is a poison or not, this is a patent medicine, and that therefore none of the requirements of this Act have any reference to it, it being a patent medicine. I had better deal with that as it comes first in the order of sequence. The question of a patent medicine is dealt with in the 52 George III., ehap. 150, which deals with the granting of stamps to patent and other medicines. The schedule to that Aet contains several hundreds, I should think, of the that Act contains several numerous, I should think, of the medicines of that time, patent and proprietary. I do not think they are divided, but the schedule goes on, "And also all other pills, powders, lozenges," and so forth. To put it quite shortly, it describes three different sorts of persons who may have medicines which shall come under the scheduleviz., first, persons who may have an exclusive right to make occult and secret medicines; those who have medicines for which they have taken out letters patent under the Great Seal; and, lastly, proprietary medicines. I do not know what the distinction between those who have and those who claim to have the right to make a proprietary medicine may be. Perhaps it may be the distinction of those who by purchase and so on have become possessed of the secrets of other people. This third class of persons is entirely distinct, and

what we are asked to say with respect to section 16 is that the term "patent medicine" includes all the medicines dealt with in this sehedule. At first I was considerably impressed with the view that that was the case, but on looking at this statute and finding a distinction is clearly taken between two sorts of medicines at all events, if not three—viz., proprietary medicines and medicines which are protected by letters patent-the conclusion I come to is that the words "patent medicines" in section 16 mean medicines that are protected by letters patent under the Great Seal. Therefore, the rights reserved under section 16 do not apply to this medicine in question—to ehlorodyne—as not being a patent medicine. Now, in order to see what is meant by the word "poison," and to see what is really required, our attention has been ealled to section 17, and although in one sense it does not bear on this ease, it is useful as showing what the statute really intended with regard to the word "poison." Section 17 eontains regulations to be observed by persons who are properly qualified to sell. "It shall be unlawful to sell any poison, either by wholesale or retail, unless the box, bottle, vessel, wrapper," and so forth, "is distinctly labelled with the name and the word 'poison,' and with the name and address of the seller of the poison; and it shall be unlawful to sell any poison mentioned in the first part of sehedule A to this Act, or which may hereafter be added thereto under section 2 of this Act, to any person unknown to the seller unless introduced by some person known to the seller, and on every sale of any such article"—which Mr. Bonsey says means the poison alone—"the seller shall before delivery make or cause to be made an entry in a book to bekept for that purpose, stating, in the form set forth in sehedule F to the Aet, the date of the sale, the name and address of the purchaser, and the name and quantity of the article sold." Upon that we are asked to say that the word "article" applies simply to the word "poison," and has no reference whatever to any medicine in which the poison itself is an ingredient. I must confess I was considerably impressed for some time by that argument, but upon the whole I come to the conclusion that the word "poison" is not restricted to the sale of the poison pure and simple alone, although I am not quite sure that that was not the original intention of the Aet. But, at all events, I think there is some strength given to that by the latter part of section 17, which says it shall not apply to any article" that means an article containing a poison—" when forming part of the ingredients of any medicine dispensed by a person registered under this Aet." That is to say, when you have the protection of having a person who is supposed to know how to deal with poisons, he need not put it on when forming a part of the ingredients. The eonelusion I draw from the earlier part of the section is that if the medicine does contain a poison it ought then to be labelled "Poison." It is necessary for the protection of the public that it should be labelled "Poison," and that the requirements of the Aet should be earried out by the person filling up the form given under schedule F by putting in the name and the quantity of the poison sold. That is in answer to the objection made by Mr. Bonsey that he could not do that if he did not know what was the amount of poison in a proprietary medicine. That seems to me to be the very mischief which is aimed at. That is one of the objects and duties of the-Society, I suppose—one they are now taking on themselves—tofind out what poisons are contained in proprietary medicines. That observation does not seem to apply, at all events, to this particular medicine we are dealing with—ehlorodyne—because it has been discovered that it contains a poison, and the quantity of the poison is known. The Act, in my judgment, would be perfectly well carried out if a person entering the name and quantity of the poison sold were to put down two bottles or three bottles, or whatever it might be, of ehlorodyne. Of course, in regard to any statute a case can be put in such a way as to make it ridiculous, and it might be ridiculous if a medicine which contains only an infinitesimal portion of a poison should be obliged to be labelled "Poison." But at all events no harm would be done. There must be a point at which it becomes dangerous, and a point at which it is not dangerous. It does not seem to me that it was in-tended that the Aet should be frittered away in that way Its object was the protection of the public against persons who may not have any ehemical knowledge whatever, in preventing them from dispensing or compounding poisons, which

ought not to be done, according to the Act, except by properly qualified people. One reason why patent medicines might well be dealt with differently to proprietary medicines is this. In the case of patent medicines everybody knows, or can know by inquiry, what they are compounded of. There would be no difficulty in finding out whether they had poison in them or not. With proprietary medicines, of course, it can only be discovered by analysis. That seems to be the object which the Society has taken in hand, and has succeeded so far as to get the chlorodyne labelled "Poison." It seems to me—not that that is binding in this case—but if that is so, if it does contain poison, it is properly labelled "Poison," and a person selling it who is not a properly qualified person under the Act would be liable to the penalties which are inflicted by this Act. As I said before, the case is not free from difficulty; but giving it the best consideration I can, I come to the conclusion that the learned County Court Judge was right.

Mr. Justice Collins: I am of the same opinion. It is not necessary for me to go through the sections which have been dealt with in detail by my learned brother. There are two points for consideration before us. First, was the thing sold agoison within the meaning of 31 and 32 Victoria, chapter 141: then, if it was a poison, does it come within the exempticn, n section 16, which exempts patent medicines? These are the two points we have to deal with. We have listened to an exceedingly able argument from Mr. Bonsey, who certainly gave the Court all the assistance it could hope for in a case of this kind. It is a case of considerable difficulty, and I am, not by any means sure that I have arrived at a right conclusion in the matter. However, I have come to the conclusion which I am about to state. I think in this particular case the object in question—chlorodyne—does come within the designation of a poison within the meaning of the Act. It is found in the case that this compound does contain more than one poison; it contains opium, or a preparation of opium, and it contains chloroform, both of which are poisons included in the second schedule to the Act. It is also found that in the bottles sold there was sufficient opium to kill an adult if the whole contents of a bottle were taken at once. Therefore, in the particular case before us I think we may take it that the thing sold was in itself in its entirety a poisonous thing—that is to say, that a small quantity of it would kill—the definition given by Mr. Bonsey of a poison. Whether I am right or not in that, I am also of opinion, for reasons that I shall give later on, that it is a compound into which poison enters as one of the ingredients, and that on that ground it is within the purview of the Act and comes under the designation of poison as dealt with by the Act. But, while I am of that opinion with respect to this particular matter, which is the only thing we have to deal with in this case—viz., chlorodyne—I do not think it necessary to lay down any rule which will cover every possible case where some infinitesimally small amount of poison enters into a large compound. These questions must be dealt with when they arise. The present case is the case of a subjectmatter which, taken in a small quantity as the bottle sold, which is a small bottle, would be capable of poisoning an adult. Now, is it or is it not a poison within the meaning of the Act, which enacts broadly in the first section that it shall be unlawful to sell poisons except by the persons described? And then there are different provisions as to the poisons mentioned in the schedule to the Act. The poisons in question, as I have said, are opium and chloroform. Chloroform is put in absolutely in the schedule. Opium is put in with its preparations and preparations of poppies. We had a very forcible argument addressed to us that the schedule must and can only mean the actual poisons named therein, or some preparation of the poisons, and that the Act did not intend to apply, and does not apply, to something into which these poisons enter, but which are incapable of being described either as the poison itself or as the preparation of a poison. I do not think that chlorodyne could be described either as opium or as the preparation of opium, nor, à fortiori, could it be described as chloroform. Therefore, I think it is necessary that I should hold, in order to decide against Mr. Bonsey, that the Act docs apply to something more than the actual poisons named in the schedule itself, or a preparation of them; in other words, that an article may be poisonous which does not consist exclusively either of a poison itself, or of what may be designated as a preparation of that

poison. Now, does the Act mean to limit its operation merely to that which consists of a poison or of some preparation of a poison? I think not. I think the 17th section comes in there, and shows us what was intended to be the purview of the Act, because, after providing certain special precautions which are to be taken by the chemist in dealing with the poisons mentioned in the schedule to the Act, it goes on to say in a proviso, "The provisions of this section," which are so and so, "shall not apply to articles to be exported from Great Britain by wholesale dealers, nor to sales by wholesale to retail dealers in the ordinary course of wholesale dealing, nor shall any of the provisions of this section apply to any medicines supplied by a legally qualified medical practitioner to his patient, nor apply to any article when forming part of the ingredients of any medicine dispensed by a person registered under this Act. Now, that exception seems to me to show that the Legislature did not intend to limit the operation of the Act either to certain poisons or the preparation of certain poisons in the sense of excluding every other ingredient or compound sold. That is the view which I arrived at myself, and arrived at independently before my brother Lawrance was kind enough to call my attention to the case of "Berry r. Henderson." In that case the thing sold was prussic acid, mixed with rose-water, and the case arose under the 17th section. It was suggested that some of the formalities of the 17th section had not been complied with, but it was conceded throughout in that case that this thing, which was very largely diluted -prussic acid diluted with rose-water—which, taken in its entirety, was certainly not either prussic acid or a preparation of prussic acid-it was conceded all through the argument that that was a poison, and that the person convicted there had been properly convicted, unless he could bring himself within the exemptions by showing that this thing was a medicine into which poison entered as one of its in-Well, the Court came to the conclusion that, gredients. although there were only two things in the compound -viz., prussic acid and rose-water—that that did not prevent the prussic acid being an ingredient; in other words, that it might be one of two ingredients, and that there need not be more. They were further of opinion that, having regard to the uses to which it was to be applied, or to which the person who dispensed it thought it was to be applied, it could be described as a medicine, and therefore it came within the exemptions; but it was necessary for them to find, first of all, that it fell within the general provisions of the Act before it was necessary to consider whether it was protected by the exemptions. They did, in that case, find that this article was properly described as a poison, although, as I have pointed out, it certainly did not consist exclusively of a poison named in the schedule. Mr. Justice Lush, in giving judgment, said, "I am of opinion that the appellant has brought himself within the provisions in section 17," so that, it seems to me, the view of Mr. Justice Lush was that the Act did hit at compounds made up in part of one of the scheduled poisons, and that it was necessary to his decision to arrive at that view. Therefore that appears to me to be a distinct authority for the proposition I am laying down. When you once get to that, the question of more or less scheduled poison as a compound does not appear to me to have a logical bearing on the discussion until you get down to that other principle in law. De minimus non curat lex. But, as I have already said, it is not necessary for me to lay down any principle beyond what is applicable to this particular case, and in this particular case there can be no sort of doubt that the poisonous element, a scheduled poison, is a very large factor in the total composition. Now, that decides, in my view the first point taken by Mr. Bonsey, and decides it against him-viz., that this is a poison. Before I pass to the next point I ought to deal with an argument a very formidable argument—addressed to us by Mr. Bonsey on the wording of the 17th section. He says, and says quite properly, that the word "article" in the latter part of the section in the proviso means the poisonous element, and that only, not the whole compound. There are the words "nor apply to any article when forming part of the ingredients of any medicine dispensed by a person registered under this Act." Well, he says, if that be so, the true meaning of "article" is a scheduled poison and nothing but a scheduled poison. Then he says in the case of a medicine such as this it is absolutely impossible for a chemist

to comply with the provisions of the 17th section, because he cannot put down the quantity of the seheduled poison sold, although it is true he might put down the quantity of the compound sold. If "article" in the earlier part of the section obliges him to state the quantity of the article sold, "article" in the latter part ought to carry the same meaning. He points out in the case of a proprietary medicine where the chemist docs not and eannot know the exact amount of the poison contained, it is impossible for him to conform to the conditions laid down in section 17, and he says that is a very strong argument for excluding patent medicines from the enactments. I do not myself think it necessary to put the same meaning on the word "article" in both branches of the section. No doubt there is a logical difficulty, but I think there is a certain amount of laxity in the way the word is used by the Legislature in the first part of the section, and that it may fairly be construed to mean the thing sold, when that thing in the opinion of the Court comes under the designation "poison." It does, in my judgment, for the reasons I have already given, come under the designation "poison," although it does not consist exclusively of a scheduled poison. When I have once arrived at the conclusion that the thing sold may be designated as a poison, I feel no difficulty in holding that when the Legislature says that the chemist selling must put down the quantity of the article sold he can satisfy that obligation by describing the quantity of the particular compound—a bottle of chlorodyne it might be in this case—not the amount of the poison contained therein. Now I come to the second argument of Mr. Bonsey, and I am not sure that my last observation might not have been more germane to the second than to the first point; but the second point is. Does Mr. Bonsey bring himself within section 16 as making or dealing in patent medicines? I was a good deal impressed with his argument on the last day on which we heard this case as to that point. He says "patent medicine" is really used to describe those medicines which are dealt with in the same way as patent medicines as affecting stamping, and he says that there was evidence before the County Court Judge that at the time of the passing of the Act of 1868 "patent medicine" did not mean that which technically can be described as a patent medicineviz., that in respect of which letters patent have been granted -but that it meant, broadly, proprietary medicines; and he contended that it must bear that meaning in that section. Now, I have come to the conclusion, having regard to the object of the statute and to the provisions of the statute of 52 George III., chap. 150, which has been referred to, that we ought not to put upon the words "patent medicines" in this Act of 1868 a meaning which would very much enlarge it beyond what, prima facie, must be taken to be the meaning of "patent medicine"-viz, a medicine covered by letters patent. What is the object of the Act itself? The Act deals with the sale of poisons. Its title is "to regulate the sale of poisons, and alter and amend the Pharmacy Act, 1852." Therefore, broadly, what it deals with is Act, 1852." Therefore, broadly, what it deals with is poisonous drugs; not such things as soap and matters of that kind which Mr. Bonsey referred to. It deals with poisonous drugs and things which can be described under the designation of "pharmaca." The preamble says "it is expedient for the safety of the public that persons keeping open shop for retailing, dispensing," &c. Therefore they are dealing with the safety of the public in the matter of poisonous drugs, and, that being so, they lay down these provisions with respect to poisons, insisting that competent persons who have gone through a certain training and given credentials of their fitness shall be the only persons who shall deal with such things, but excepting patent medicines. I think the onus is on the person who thinks a patent medicine means something more than a patent medicine in the strict sense to show that that is so. Why should medicines other than patent medicines be swept into the ambit of this new Act? Mr. Bonsey says it would be a manifest injustice not to embrace proprietary medicines in it. I do not think that a case has been made out at all conclusive or even satisfactory in favour of sweeping proprietary medicines into the immunity extended to patent medicines. The object of the Act is the safety of the public, to secure that compounds into which poison enters—because that is my view now—shall only be dispensed by persons who have a technical knowledge of their properties. Can anything be

more dangerous than that it shall be at large for any person whatever to sell a patent medicine which is called a proprietary medicine, but which may contain poisons to any amount, and which, if Mr. Bonsey's contention is correct, could then be sold by any person, however incompetent, and not only sold, but compounded, and he would have the right to deal with those dangerous and injurious elements? does not follow that he intended to put in a large quantity, but, being an utterly unskilled person, intending to put in a grain he might put in a drachm, and, if he does, the very mischief which the Act was passed to meet was open to the public. Now, that mischief, as has been pointed out by my brother Lawrance, does not happen in the case of patent medicines, whose composition stands recorded for everybody who wants to find out what the exact ingredients are in a medicine protected by letters patent. It is otherwise altogether as to the things which are the subject-matter of some proprietary right. That is emphasised when we come to examine what the definition is in the Act which Mr. Bonsey relied upon which imposed stamp-duties on patent and proprietary medicines, because when we look to see what the Act deals with, it deals not only with patent medicines, but when dealing with proprietary medicines it uses very large language indeed, as showing what comes within the description "all other pills," &c., made, prepared and so on "by any person whatsoever wherein a person hath or elaims to have any occult secret or art for making or compounding the same, or hath or claims to have any exclusive right to making or preparing the same." Then come patent medicines in the proper sense of the term, and then any that shall hereafter be by any public notice or advertisements or by any written papers, handbills, &c., set forth to the public for the prevention, cure, or remedy of diseases. Practically it seems to me that any person with however slight claims to have a proprietary right who chooses to put forward a claim or to send out his compound with a document, notice, or advertisement, claiming for it that it is his nostrum or specific compound, brings the compound within the designation of proprietary medicine, and as such gets that complete immunity extended to patent medicines. Therefore a person, however ignorant, may sell as much poison as he likes, or can deal with the mixing and eompounding of poisonous elements which, when taken by the public, may be injurious to them, and, furthermore, leave behind no trace whatever which can be followed out, though one of the main provisions of the Act is a provision whereby the amount sold and the person to whom it is sold ean be traced. Therefore I do not think that any case at all is really made on the main purview of the Act for bringing proprietary medicines under the same category as patent ones. There Mr. Bonsey has the words against him, and has not the broad principles of justice and common sense, as it seems to me, in his favour. Then he says, "But are you going to stop the sale of this medicine altogether! If the view which the Court takes is that which I am now presenting, it will be impossible for any person to sell proprietary medicines. First of all, a person who is not a chemist cannot sell them because they are poisons, and a person who is a chemist cannot sell them except under conditions which it is impossible for him to comply with." That is his argument under section 17. Now, I am not so much impressed by that argument when I come to dissect it, because if a proprictary medicine is really a matter which it is worth the while of the public to buy, and therefore worth the while of a chemist to sell. surely it is worth his while to ascertain by analysis what the amount of the deleterious ingredient is in any given compound. When that has been once ascertained and circulated among chemists there will be no difficulty whatever in a chemist conforming to the provisions in section 17, and putting down the amount of the poisonous ingredient, and thereby secure all the ends intended by the Legislature. Therefore I think practically where it is worth the while of the vendors to the public to overcome that difficulty, it can be overcome, and I am not at all impressed with the inconvenience of that as against the other and greater inconvenience-one which, it seems to me, is broadly opposed to the main seheme of the Act -viz., leaving in the hands of purely incompetent persons this dangerous instrument—viz.. poisons—with leave to dispense them and compound them as they choose. I am therefore of opinion that this appeal must be dismissed.

Mr. Poland: With costs?

Mr. Justice Collins: Yes.

On the application of Mr. Bonsey, stay of execution for a fortnight was granted, with a view to an appeal.

BROAD'S PATENT NIGHT-LIGHT COMPANY (LIMITED).

At the Law Courts, on Saturday, the case of Driver r. Broad came before Mr. Justice Mathew and a special jury. The action was brought to recover damages for breach of a verbal contract of December 8, 1891, whereby, it was alleged, the defendant agreed to purchase Mr. Driver's interest in Broad's Patent Night-light Company (Limited). The plaintiff said that Mr. Broad had wholly failed to carry out his part of the contract, and claimed 2,400l, damages. The defence was that the arrangement was subject to the approval of Mr. Fowler, one of the three persons principally interested in the business, and he had never given his sanction. The defendant also pleaded there was no writing to satisfy the Statute of Frauds. Mr. Driver, on the other hand, asserted the defendant made the contract independently of Mr. Fowler (his son-in-law), who, he thought, was acting arbitrarily.

Mr. R. T. Reid, Q.C., M.P., and Mr. Edward Martin were counsel for the plaintiff; Mr. F. Lockwood, Q.C., M.P., and

Mr. A. T. Lawrence were for Mr. Broad.

The jury returned a verdict for the plaintiff, being of opinion that the arrangement was to buy Mr. Driver out at 2,300*l*.

Mr. Justice Mathew reserved the question of law for future discussion.

KOLA AGENCIES.

AT the Birmingham County Court on February 8, before Judge Chalmers, an action was brought by Lakola (Limited), of Glasgow, against A. G. Boraston, grocer, Birmingham, for 261. 9s., for goods sold and delivered. The goods sold were preparations of the kola-nut. Defendant set up a counterclaim for 50l. damages for breach of an agreement whereby the plaintiffs agreed that on consideration of the defendant accepting the agency for the sale of lakola in Birmingham and district, and giving an order for lakola, he should be assisted in the sale thereof by the representative of the plaintiffs, that all orders obtained by the plaintiffs within such district should be supplied from the defendant's stock, that the goods were to be extensively advertised in the district, that arrangements were to be made with hotel and restaurant-keepers for the opening of lakola bars, that the plaintiffs should allow the defendant an extra discount of $7\frac{1}{2}$ per cent, in consideration of him accepting such agency, and that no person or firm other than the defendant should be put on such favourable terms with regard to discount or otherwise. Evidence was given by the secretary to the company, Mr. Southern, the traveller then, and other witnesses, to the effect that the plaintiffs were anxious to push the sale of lakola, and they appointed the defendant an agent for Birmingham and the district, but no contract was entered into as alleged in the counter-claim. The defence was that the goods supplied were worthless and not saleable, and that defendant was not the only man supplied in Birmingham on the special terms offered by the plaintiffs. The jury gave a verdict for the plaintiffs for 21*l*. 19*s*. 6*d*., and for the defendant on the counter-claim for 21.

The plaintiffs also brought an action against William Norris, grocer, to recover 41*l*. 7*s*. under similar circumstances.

A similar counter-claim was set up in this casc, and the defendant, in his evidence, said the lakela was unsaleable, and altogether from first to last he only sold 10s, worth. The jury gave a verdict for the plaintiffs for 41l. 7s. on the claim, and also for the plaintiffs on the counter-claim.

ADVERTISING ANTI-STIFF.

At the Clerkenwell County Court, before Judge Eddis, on February 7, the Grocers' Association (Limited), of Crucifix Lane, London Bridge, sucd Joseph Wilson, chemist, of Winchester Avenue, Brondesbury, for 1l. 3s. 2d. for advertisements of "Anti-Stiff" inserted in the Association's weekly list for one year at 5s. per insertion. It had been agreed that the Association's travellers should "push" the sale of Mr. Wilson's embrocation, and samples of it had been taken out

by the travellers. The defence was that the quotations of defendant's embrocation were incorrectly inserted in the list. The plaintiffs produced a letter showing that they had requested the defendant to supply the correct quotations after he had complained to them, but this request was not complied with. The Judge gave judgment for the amount claimed.

THE TRADE-MARK "YORKSHIRE RELISH."

On Tuesday, in the Chancery Division of the High Court, Mr. Farwell, Q.C., appeared on behalf of the Birmingham Vinegar Brewery Company, in support of a motion asking that the trade-mark (No. 37,030) of Mr. Powell, trading as Goodall, Backhouse & Co., of Leeds, might be expunged from the register, on the ground that the trade-mark "Yorkshire Relish" was merely a geographical description, and as such could not be registered. Mr. Farwell contended that the mark in question could not be registered unless it was shown to have been used as a trade-mark prlor to 1875. That, in his view, had not been done. No doubt the words "Yorkshire Relish" had been stencilled upon cases containing the bottles of sauce, but that did not constitute a trade-mark. He suggested that the words were put upon the cases to let railway porters and others know that there were perishable goods inside, because he believed even railway porters were aware that Yorkshire Relish was a kind of sauce.

Mr. Aston, who appeared for Mr. Powell, said the applicants could not show that they were persons aggrieved, for there was no evidence that they intended to use, or were desirous of using, the trade-mark in question. He submitted that the words had been used as a trade-mark by Mr. Powell prior to 1875, and that they were accepted by the trade as

such.

His Lordship held that the applicants were aggrieved persons within the meaning of the Act, and, furthermore, that the placing of the words "Yorkshire Relish" upon the packing cases did not constitute a prior user of a trade-mark within the meaning of the Act. He therefore came to the conclusion that the applicants were entitled to succeed, and that the mark must be removed from the register.

ELECTROPATHIC BELTS.—TIBBITS v. ALABASTER AND OTHERS.

ON Wednesday, the trial of this action came before Mr. Justice Mathew and a special jury, in the Queen's Bench Division.

The plaintiff, Henry Tibbits, M.D., claimed damages in respect of an alleged libel, published by Henry Alabaster, Tom Ernest Gatehouse, and Harry Robert Kemp, in the Electrical Review of September 23, 1892, of which paper the defendants are the proprietors.

The defence was that what was published was fair criticism on a matter of public interest, and, therefore, justified.

Sir Richard Webster, Q.C., M.P., and Mr. Germaine were counsel for the plaintiff: Mr. Lawson Walton, Q.C., and Mr.

Banks represented the defendant.

In opening the case, Sir Richard Webster said the action was brought by Dr. Tibbits in respect of what would not be disputed to be a libel in the sense that it imputed misconduct as well as ignorance to Dr. Tibbits. Dr. Tibbits was a medical man of very high qualifications, an M.D. of Edinburgh, and possessing considerable degrees in England, and he had for a long time been interested in what was called "massage and electrical" treatment of complaints. The defendants were the proprietors of an electrical paper, who had thought fit to make a series of attacks upon the treatment that would be the subject of discussion in this action, and to include therein anybody who had expressed an opinion, however honest and however well-founded, having regard to his own investigation. There had been established at 52 Oxford Street for some years an institution on which between 40,000%, and 50,000%, had been spent in fitting it up with the most elaborate and improved appliances for electrical treatment. The institution was called the Electrical and Zander Institute, and although at present with regard to its conduct he (Sir Richard) had nothing to say, it was only fair to state that from the commencement invitations had been given to medical men to come and see what was going on. Quite apart from the electrical treatment that we n

on in the institution itself, Mr. Harness had invented and patented many electrical appliances. Some time ago he invented what was called "Harness's Electropathic Belt." The principle of that belt was this: It was well known that copper and zinc placed in water and brought in contact produced an electric current. The sehoolboy experiment of placing eopper and zinc on either side of the tongue and putting them together in order that an electric current might pass was well known. Mr. Harness, and many medical gentlemen, believed that if a very mild electrical current were passed through certain parts of the body they produced a beneficial result. The belt, therefore, consisted of a number of alternate discs of copper and zinc, which, being brought together, the circuit was completed by the moisture from the warm skin. That electric currents did pass through the body there was no question, and if the jury had to consider the matter, he (Sir Richard) would call overwhelming testimony that, whether electricians sneered or not, persons had experienced the greatest benefit from wearing the belts. Dr Tibbits, who had taken great interest in massage and the electrical treatment of disease, was asked by Mr. Harness to examine his metbods and make a report. Dr. Tibbits said he would do so, but that he would have to make a number of experiments, and as he was a busy man he could not do it for nothing; his report must be taken, whether it was good or bad. Mr. Harness agreed and undertook to pay the plaintiff a fee of 100 guineas. Dr. Tibbits made careful experiments, extending over several weeks, with the belts, and reported. His report was the honest opinion of a medical man who had examined into the action of these belts. He (Sir Richard) did not care whether persons got any benefit from the belts or not-they thought bey did. That being so, if there was an attack to be made, it ought to bave been made on the Harness Institute. But that did not satisfy the proprietors of the Electrical Review, who, in that paper and another called Science Siftings, had from beginning to end unfairly attempted to prejudice the public mind by statements which were libellous. The learned counsel then referred to what he termed the libel written concerning the plaintiff, and published in the *Electrical Review* of September 23, 1892, under the heading "Electricity and the Medical Profession." The article commenced by saying that probably there was no branch of medical science so little understood by practitioners as that which involved the use of electricity for eurative purposes, and that to an expert in electrical science the extraordinary ignorance which was displayed even by men of acknowledged standing in the medical profession was a matter for wonder, and calculated to make one lose faith in the reliability of the profession generally. It went on to say :-

To show a want of sympathy with real suffering brands a man as unfeeling; to take advantage of that helplessness to wring money from the sufferer stamps a man as being beneath contempt; yet of such a class are the men who fatten by the sale of useless electrical appliances, and who should be effaced by the strong arm of the law.

The article proceeded to say that, no sign being visible of those in authority in the medical profession taking action, they (the *Electrical Review*) were compelled to take up the cudgels on behalf of the public. This was followed by a reference to Dr. Tibbits's pamphlet on the "Treatment of Disease by the Prolonged Application of Currents of Electricity of Low Power," which the writer of the article characterised as a grave reflection upon the intelligence of the medical profession generally, "seeing that the pampblet was nothing more nor less than a direct recognition by Dr. Tibbits of the "Harness electropathic belt" as a valuable electro-medical appliance. The article then called attention to the report of a trial in the Bloomsbury County Court, which was reported in the Electrical Review on July 22 last [and in The CHEMIST AND DRUG-GIST, July 23, 1892], in which it was brought out that one of Mr. Harness's qualified medical officers, who dealt with cases of hernia, was originally a furniture salesman. It said that, in view of that fact, the reference in a letter signed by the plaintiff and written to Mr. C. B. Harness, saying that he desired to congratulate Mr. Harness upon the very efficient machinery and instruments he possessed, and that having been brought into contact with several of his (Mr. Harness's) qualified officers and nurses he could testify to the value of the Institute, should be noted. The article further stated (referring to Dr. Tibbits's account of his experiments with Harness belts)— $\,$

A perusal of the foregoing by anyone who has a very elementary know-ledge of galvanie electricity will at once show that the writer exhibits a most incredible ignorance of electrical laws—an ignorance which utterly unfits him to speak as an authority, and which, in view of the support which it affords for the bolstering-up of this appliance, seems to call for an interdiction by the British Medical Association. We are pleased to note that Science Stitings has entered the arena to do battle against this imposture. We heartily wish it success, and we feel little doubt but that what is undoubtedly a grave scandal may at last be unveiled in all its grossness, and the promoters and abettors brought to book.

Sir Richard called attention to the fact that Dr. Tibbits was charged with almost incredible ignorance of electrical laws—ignorance which, it was suggested, had been so applied as to render his "interdiction" (meaning prevention by the Medical Council from practising as a medical man) desirable. What was the connection between Science Siftings and the Electrical Review? He (Sir Richard) thought they would find that the proprietors of both papers were the same, and that the pen which inspired the Electrical Review bad a great deal to do with Science Siftings, which was supposed to be independent. That the article was a libel there could be no doubt. To charge a professional man with imposture, and to say that be was an abettor of a gross fraud, was calculated to do as much harm to a medical man as could well be imagined. It was all the harder on Dr. Tibbits because that gentleman bad become a bankrupt through an entbusiastic (it might be a rash) attempt, by means of a bazaar, to promote a hospital for the poorer classes where the processes he had started and developed might be carried out. In conclusion, counsel submitted that, in the face of what he should prove, this was a gross and slanderous libel, entitling Dr. Tibbits to very substantial

Dr. Herbert Samuel Tibbits, examined by Sir Richard Webster, said he had been in practice twenty-eight years in Wimpole Street. He had been bankrupt, and had offered his ereditors all he made over 400%. He had made a special study of massage and electricity as applied to medicine. He was a pupil of Duchène, who was the greatest authority on the subject in question, and had translated that gentleman's book on "Localised Electricity." He had no connection or pecuniary interest in the Zander Institute. Mr Harness called upon him and offered him 100 guineas for a report on his belts. He told Mr. Harness that he would take time to consider, but that his report must be accepted wbether favourable or unfavourable. He experimented from six weeks to two months with five or six belts. The value of electricity in paralysis, spasms, and weakness, had been known for some time. It had been found useful when overt medicine failed. He established schools of massage in London. Harness's belts had discs of copper and zinc. The copper and zinc discs in each section were connected metallically. When he started the investigation he was in doubt about it. His report was a truthful and honest one. He ascertained that a current of electricity did pass through the body when the belt was worn, the opposite poles being connected by a metal connection. It had been suggested that the current only went over the skin. He tested that and found the current did go through the body. No one could say for certain that such currents going through the body were useless. His experience was that they had a beneficial effect. He sent in the report to Mr. Harness and received his fee. He had nothing to do with the subsequent publication. He had visited the Institute and had conducted many experiments there. The electrical machinery and appliances were the best he had ever seen. He had no knowledge of the proeeedings at the Bloomsbury County Court beyond what he saw in the papers. He had seen the persons who attended the patients. They appeared to him to be qualified persons. He had studied electricity as a medical man, but not as an electrician. He reported upon the belt before he had had any personal experience with regard to its result on patients. He believed the libel had had an effect upon his practice as a medical man, but did not vouch for it.

Cross-examined by Mr. Walton, Dr. Tibbits said he was bringing this action for his own benefit exclusively. Mr. Harness was finding the money to carry it on. He had been

bankrupt, and had never received his discharge. He stated in 1891, at the time of his bankruptey, that for some years his professional income had not exceeded 250 l. from fees. The West-end Hospital was not a private hospital, but was the property of a committee and trustces on behalf of the public. It had been built with money he advanced, and for which he received no interest. The West-end School of Massage belonged to his wife. The school had a house separate from the hospital. The students were permitted to attend the lectures at the hospital. Witness founded the school in 1886, and transferred it subsequently to his wife, because it was not etiquette for a physician to carry on a trading business. He did not himself look upon it as such. From 1887 to March, 1891, he received 1,400*l*. for his wife from the school. It was not all profit. They had an Ice Carnival in connection with the West-end Hospital. There was 1,400l. profit from it. It lasted three or four days, and the expenses were enormous. The gross receipts must have been hetween 4,000*l*. and 5,000l. They had held seven bazaars for the hospital, and he had made himself responsible for them, obtaining 6,000l. for the hospital. He had brought an action against Messrs. Macmillan in respect of a criticism that appeared in Nature dealing with a book of his on massage. That was some years ago.

You speak of the assistants at the Institute in Oxford Street as being legally qualified men?—Yes; I have been introduced to a gentleman who had qualifications.

Do you read the Lancet?—No. (Laughter.) I disapprove of both the Lancet and the British Medical Journal. (Laughter).

In this case, to put it plainly, you were to give Mr. Harness a puff and he was to give you a puff?—No; most decidedly not.

Do you say this belt will make electricity pass through the body?—Not without external connection. There was connection in all that I examined.

Mr. Justice Mathew: We are not inquiring into how an absent person carries on his business.

The witness explained the construction of the belt. He said the intensity is increased by the multiplicity of the discs.

When the belt is worn, would it make any difference whether you had one cell or twenty?—It increases the quantity, but not the power of penetrating the skin.

Do you say the experiment with the galvanometer described has the smallest scientific value l—Yes.

Is it not the fact that in doing what is described you get the result of a second circuit that is formed?—You get both.

You get a result obtained by the current formed by the insertion of the platinum needle, but it does not show that any current is passing from one pole to the other ?—I say it does.

Referring to an experiment on a rabbit, which counsel suggested was of little or no value, witness said he did not admit that, but it had been published since the libel. Asked whether it was not misleading to convey the idea that the belt might be connected for intensity and the current passed through the body of a rabbit, he said the important question for the public was whether they got any electricity. As to the dose, in the present state of electrical knowledge nothing had yet been decided.

Have you taken into consideration the medical value of the belt?—I have seen thousands of testimonials, but I only certify as to the electricity passing through the hody.

Did you not ask Mr. Harness to afford you an opportunity of seeing the patients?—How could 1? they were private patients, belonging to other medical men. If you were wearing a belt, and a strange doctor called upon you, would you take off your clothes and show it to him? (Laughter.)

Do you adhere to the opinion you expressed in this book as to galvanic appliances?—No; I have altered it.

Since Mr. Harness has made a convert of you?—If you choose to apply that term to it.

Mr. Justice Mathew: We are not here to try the helt.

In re-examination, witness said all the money he received from the bazaars went to the hospital. He made himself responsible, and the last resulted in a loss of 1,500l.. which sent him to the Bankruptcy Court. The School of Massage was carried on at first at the hospital, and afterwards at a house

close hy. In the belt he tested all the elements were doing work and generating electricity.

Mr. Aithur John Harries, practising in Sackville Street, the author of numerous papers and works upon the curative effects of electricity, said he had made a number of experiments with reference to Harness's belts. He found they generated a current of electricity which would flow through the body when placed upon it.

Closs examined by Mr. Walton: He expressed that opinion having regard to the external connections on the belt he examined. With a perfectly dry skin the current would be very small; with a moist skin, perhaps ten times increased. He had performed no experiments as to the therapeutic value of the belts. From 2 to 5 milliampères was the lowest current of electricity known for general use in medical electricity. He had reported on certain belts submitted to him by Mr. Harness. The report had been published, but not by witness.

Nr. Germaine proposed to call a witness as to the curative effect of the belt.

Mr. Justice Mathew did not see the materiality of such evidence. All the plaintiff said was that the appliances generated electricity; he did not say what good they were as remedies.

Mr. Germaine said he would not call that class of witness. Dr. Russell Harris, practising in Adam Street, Adelphi. stated that he had tested the belts and was of opinion they generated electricity. When worn on the body the current would pass through, and would, he thought, be of value. In cross-examination Dr. Harris was asked whether the electricity did not pass over the skin instead of going through the body. The witness did not think so, as the resistance of the perspiration would be too great.

Mr. Justice Mathew did not see the importance of the question. The current might do just as much good therapeutically by passing over the skin as going through. (Laughter.) Neither side seemed to know much about it. (Renewed laughter.)

Mr. Bankes said they would prove the belts were sold without the coupling-up appliances.

Dr. Harris stated he had not investigated the question whether a current passing over the skin would be as useful as one going through the body.

Evidence was then given by Mr. J. W. Wilson, Mr. H. F. Joel, and Mr. S. J. Mackie, electricians, to the effect that they had examined and tested a number of the belts submitted to them, and had found that they generated electricity which must pass through the body.

This closed the plaintiff's case.

The hearing was resumed on Thursday.

Mr. Walton, in stating the case for the defence, said it was important the jury should know who were the gentlemen who accepted the responsibility for this criticism. Mr. Alabaster, accepted the responsibility for this criticism. Mr. Kemp, and Mr. Gatehouse founded some ten years ago the Electrical Review. They were all scientific men, and Mr. Gatehouse and Mr. Kemp, who were specially responsible for the article impugned, were men of some eminence in the profession. Mr. Kemp was an electrician attached to the Post Office, and Mr. Gatehouse was an electrical engineer who was for some years the chief of the testing department. of the British Telegraph Manufactory, so that he would invite the jury to hold that the defendants had competently criticised an appliance sold to the public, and which the public were invited to purchase. They were men who could form an opinion of some weight, and they had formed in this case a perfectly honest opinion. His clients looked upon this belt as heing an utterly worthless article. It was impossible to censure the statements in the pamphlet without in some degree reflecting upon Dr. Tibbits, as it really consisted of his opinions and writings. Dr. Tibbits and Mr. Harness were mutually assisting each other-the one helping the sale of the belts, and the other advertising his friend's book. Dr. Tibbit in 1889 had written a book in which he said he thought such appliances as those in question were of no value. He had a perfect right to recant that condemnation; but in the pamphlet published by Mr. Harness he should have taken care to make it plain he did not vouch for the medical value of the belt, but simply spoke as to scientific attributes. They had been told that Dr. Tibbit's professional income had not been more than 250l., and here they had Mr. Harness approaching him and offering him 100 guineas for

his opinion. Mr. Harness was finding the money for these proceedings. Mr. Harness was not bringing an action himself.

Sir Richard Webster: 1 beg your pardon, Mr. Walton, you are completely misinstructed.

Mr. Walton: He is not bringing an action upon this artielc.

Sir R. Webster: Yes.

Mr. Walton insisted that the real person was keeping in the background, and putting forward Dr. Tibbits as one more likely to enlist the sympathies of a jury and get damages in respect of the belts than himself. Mr. Harness yesterday became a critical witness for the plaintiff, and yet he had not been called. It was clearly indicated that the defendants were going to assert the relations between the plaintiff and Mr. Harness were of a closer character than that represented by Sir R. Webster, and yet the crucial witness had been adroitly kept out of the box, because it must have been perfectly well known that his eross-examination would have been fatal to the plaintiff. It would be proved that the belts were sold and worn in the ordinary course without the outside connection, which was with a view to attaching the appliance to a battery. The wire was sold loose for attachment or detachment. Not a single member of Mr. Harness's staff had been called to show that the defendants were under a misconception with regard to that. The jury would be asked to come to the conclusion that Dr. Tibbits had ignorantly or negligently attached his name to an opinion which would encourage the sale of the belts. The learned counsel went on to point out that the public were given to understand by the pamphlet that the number of buttons in the belt had the result of intensifying the electrical current. The plaintiff had to admit it was a mistake. It was now conceded that if you put on the belt with a single button on each side you got precisely the same degree of intensity as if you put it on with fifty. The material point in this case was intensity. The conclusion the defendants came to was that Dr. Tibbits was extremely ignorant of the subject on which he was writing, and that it was deplorable and reprehensible a gentleman in his position should lend himself to this business. They had used in this case Lord Kelvin's galvanometer. an instrument which would show an almost infinitesimal current of electricity if that current existed. But it had been used in such a way as not to test the current passing from zine to eopper, but from zinc to the platinum pin inserted. Of course, what should have been done to prevent the independent current being set up would have been to insert two platinum pins. A dispute in this case was as to the way in which the belts were supplied to Dr. Tibbits. The defendants assumed that the belt Dr. Tibbits examined was one without the outside connection. If Dr. Tibbits did get deflections by attaching the poles of the galvanometer to the inside sides of the belt, then there could have been no outside metallic connection. In the pamphlet there was other evidence of Dr. Tibbits's ignorance of the subject, and he (Mr. Walton) thought that when the jury had heard the evidence he was about to call they would have no hesitation in finding a verdiet for the defendants.

A witness having been called to prove the purchase of a

belt from Mr. Harness. It had no outside wire.

Lord Kelvin, President of the Royal Society of London, said he had made a lifelong study of electricity. He had examined the belt produced, and in its present condition it was not capable of generating any electricity if worn upon the body. There was no means of coupling the discs in any way in the belt he had in his hands. Separate appliances would be necessary to apply it to a galvonometer. If connections were made and the belt applied to the galvanometer you would get no perceptible current, because the belt would be short-eireuited. There would be an infinitesimal eurrent, but he believed it would be too small to show upon the galvanometer. From the description of the experiment it seemed absolutely certain that the short wires were not eonnected up. The eurrent spoken of arose from one formed between the platinum needle and the copper or zinc. A single needle could not tap the current.

Cross-examined by Sir R. Webster: What was known as Sir William Thompson's galvanometer was his (Lord Kelvin's) instrument. It was the instrument used for testing

very mild currents of electricity.

Have you made any experiments to test the currents with the belt?-No; because I perfectly well know what the result would be without making any. (Laughter.)

Assuming the connections to be properly made a current of electricity would flow through the body, entering by the zinc surface and leaving by the tinned-copper surface ?-There certainly would be a small current.

Whether enough to deflect a galvanometer you have not

tried?—I have not tried.

You are not a medical man, Lord Kelvin; I believe it is the only attainment you do not possess?—I am an M.D. -(loud laughter)-An honorary M.D. of the University of Heidelberg. I have a licence to practise, but have never exercised it.

Sir Richard Webster read to the witness certain statements contained in a leaflet, and asked if it were issued with the belt whether it would not indicate that the discs were to beconnected? Lord Kelvin replied: "To an electrician, yes; but not to an ordinary member of the public."

By Mr. Bankes: If the belt were properly coupled up the strength of the current would vary with the moisture of the skin. In favourable conditions it would be a small fraction of

a milliampère.

Sir Richard Webster pointed out that there was really no confliet about the electrical part of the case. It was now admitted on both sides there would be a faint current.

Mr. Justice Mathew: Yes; a faint current.

Mr. Bankes said he proposed to call a number of witnesseswho had purchased the belt.

Mr. Justice Mathew did not see how it was relevant. Mr. Bankes was, he said, really attacking the mode in which a certain business was carried on.

Mr. Bankes said their article was directed solely to unconnected belts. They had never doubted that the belt, when properly connected up, did generate an infinitesimal quantity of electricity. What they objected to was the sale of unconnected belts.

Mr. Justice Mathew: That is not the impression produced on my mind. You are attacking all the belts sold by Mr. Harness, and deny the therapeutic value of such appli-

Sir R. Webster: And I am appearing for Dr. Tibbits.

Mr. Bankes: What we say is that, although you have wonderful applianees at your institution, you are selling to the public articles that cannot generate electricity at all, and therefore the object is to gild the counterfeit.

Mr. Justice Mathew: That is not my construction of the article. I do not think the evidence you tender admissible for the purposes of this case.

Mr. Bankes: The evidence would be to show that belts were sold at Harness's place not coupled up, and no directions given about it.

Mr. Justice Mathew took a note of it.

Mr. T. E. Gatehouse, one of the defendants, was then called, and stated that he and his partners had absolutely no connection with Science Siftings. He thought he could take the sole responsibility of the article complained of. He wrote about the belt as sold. He made tests as to the quantity of electricity that could be produced by the belt when connected up. It was from $\frac{1}{100}$ to $\frac{1}{400}$ of a milliampère. The belts he had had purchased and had examined were without eouplings, and with them the quantity of eleetrieity that could be generated was so small as to be practieally useless.

Mr. Kemp, Mr. James Swinburne and Professor Thompson all of them electricians, eorroborated Lord Kelvin and Mr. Gatehouse.

Dr. Alma De Watteville was of opinion the current produced by the Harness belt had no therapeutic value. If the skin were dry the current would be practically nil. The minimum medical dose of electricity would be 3 or 4 milliampères, and that must be applied to the diseased part.

Dr. H. L. Jones gave the dose as from 2 to 10 milliampères Other electricians having been called, Mr. Lawson Walton addressed the jury, and the Court adjourned.

CHLOROFORM AND IODINE.—At incipient redness chloroform decomposes in presence of iodine, yielding mainly C₂Cl₄ and C₂Cl₆, with CCl₄, C₆Cl₆, and C₄Cl₆ as secondary products.



Kotice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., February 15.

The Drug-trade and the Railway Rates.

Messrs. W. H. Francis and Charles Umney, representing the Chemical Section of the London Chamber of Commerce, will form part of the deputation of various trading interests which will wait npon Mr. Mundella at the Board of Trade on Friday, to lay before him their grievances on the subject of the new railway charges. On behalf of the druggists attention will be particularly called to the increased rates on smalls and on emptics, and to certain special rates on some chemicals, methylated spirit, &c. It is not proposed to make any general complaint of the new rates on drugs, which were practically adopted with the consent of the representatives of the drug-trade. With regard to the points to which objection is taken, we are told that the southern railways are regarded as the chief offenders in the matter of unfair charges.

Unearned Increment.

About eighteen months ago a wholesale druggist bought a few cases of East Indian gum kino at 37s. 6d. per cwt., which was then the price, and is about the nominal value. Owing to stoppage of supplies, kino has become so scarce that he has just been able to resell it (he tells us) for export at a price equivalent to 300s. per cwt., or eight times the cost. This is the highest price on record for the article.

. ALOES.—*Curacao* aloes are reported dearer in New York, and fresh arrivals are being bought up readily.

Balsam (Canada).—In New York the price has risen to the parity of 1s. $7\frac{1}{2}d$. to 1s. $8\frac{1}{2}d$. per lb., c.i.f. terms, for good bright balsam. The scarcity is becoming acute, and owners, apprehending an exhaustion of the supply before the arrival of the new crop, demand higher prices after each transaction.

BALSAM COPAIBA.—The stock in first hands in New York is said to be very large—about 140 packages—and this has brought about a decline in the value. Thin $Par\acute{a}$ and good thick Maranham balsam are offered at 1s. $6\frac{1}{2}d$. per lb., c.i.f.

Balsam Tolu.—Very heavy arrivals in New York, and an accumulation of stock there, have brought down the price to the lowest figure on record. Holders are willing to sell at from $11\frac{1}{2}d$. to $12\frac{1}{2}d$. per lb., c.i.f. terms.

Canary-seed.—Heavy arrivals have been discharged this week from Turkey (the Orchis alone brought nearly 3,000 bags), Africa, and Portugal.

CANTHARIDES.—Russiun flies are offered from Hamburg at 2s. $8\frac{3}{4}d$. per lb., c.i.f., for unsifted; and 2s. $11\frac{1}{2}d$. per lb., c.i.f., for sifted flies of last year's crop.

CASCARA SAGRADA.—New York reports a firmer market, all low-priced lots having been bought up by large consumers. There is now very little left in the hands of speculators, and practically nothing on the Pacific Coast, 50s. c.i.f. is the quotation for old, and 40s. c.i.f. for last year's bark.

CEVADILLA. — The price of cevadilla sced in Hamburg has now risen to 1s. 8d. per lb. c.i.f. terms. There is hardly anything to be had at that figure.

CINNAMON.—Rather dearer. For arrival 100 bales "usual assortment" Ceylon, January/March steamer shipment, have been sold at $6\frac{3}{4}d$. per lb. c.i.f. terms.

CLOVES have fluctuated considerably. At auction there was a little demand for Zanzibar, of which only 47 bales dark sold at $4\frac{5}{6}d$., while 19 cases Penang realised $6\frac{5}{8}d$. to $6\frac{1}{3}d$. per lb. for ordinary unpicked and 11d. per lb. for good picked. Privately, Zanzibar cloves improved considerably since the auctions, and a larger business was done for delivery, from March to August, at $4\frac{11}{16}d$. to $4\frac{13}{16}d$. per lb.

Galls.—For new crop *China* galls on the spot a bid of 57s. 6d. per cwt. was refused the other day. The owners require 60s. per cwt. Further sales of fair China galls (100 cases) at 50s., c.i.f. London or Continent, February-March steamer shipment, are reported. Moderate sales of good blue *Bassorah* galls at 60s. and of ditto green at 50s. per cwt. are reported. Green *Smyrna* galls are being offered for delivery without success. *Morea* galls have sold in a small way at 25s. per cwt. for good quality.

GINGER.—Again dearer. At auction Cochin ginger was in good competitive request at higher rates, 278 bags rough solling at 63s. to 68s. for small bright (D) to fair, and 60 cases dull to fair (C) at 75s. to 76s., and (B) at 80s. to 81s. African root brought 55s.; Jamaica, 62s. for monldy Rhatoon, and 65s. 6d. to 67s. for fair to go od common.

GUM TRAGACANTH.—The exceedingly small stock is very firmly held. Good pale first *Smyrna* gum has sold at 14*l.*, and *Bagdad* is held for the same price. Second grade Bagdad gum has sold at 13*l.* 10*s.*, and third at 12*l.* per cwt.

IPECACUANHA.—Our arrivals this week consist of 21 packages Cartagena root from Panama, and 4 packages Brazilian from Monte Video.

OIL (COD-LIVER).—It is stated that the stock of cod-liver oil at the commencement of the season was 12,000 barrels, against 15,000 barrels at the commencement of the season of 1892. The weather in the Lofoden has been terribly boisterous, and during the first few days of the fishing 140 fishermen are reported to have perished.

OPIUM.—"Excited" is the description given by dealers here of the Smyrna market, but though London displays considerably more firmness, it can hardly be said that there is much excitement here up to the present. Druggists', Soft shipping, and Persian opium has been sold at the highest range of last week's rates, and most holders are now asking more money, but we can hardly report an actual rise in the prices paid. The quotations rise from 10s. to 11s. 6d. per lb. for good to fine soft shipping, 8s. 9d. to 9s. per lb. for fine, and 8s. 3d. to 8s. 6d. per lb. for second druggist's kind, and 9s. to 10s. per lb. for Persian.

PICHI is being offered from New York at 2s. per lb. c.i.f. terms for good green tops.

QUICKSILVER.—There has just been an arrival of 6,999 bottles from Huelva. Market firm at 6l. 7s. 6d.

QUININE.—The tone is rather steady, and small sales of second-hand German bulk at $9\frac{1}{3}d$. to $9\frac{1}{4}d$. per oz. are reported. The following figures relate to the imports into the United States during the past two years:—

 Quinine and other cinehona salts
 oz
 3,486,922
 2,597,099

 Cinehona bark
 ...
 lbs
 3,144,284
 2,861,423

SASSAFRAS.—Root is offering at 7l. 10s. c.i.f. terms from America, and root bark at 3³d. per lb., which is lower.

SENEGA.—The stock of senega in New York is said to be less than 3 tons. It has not been so small for years. In the West there are (so we understand) only two holders, neither of whom own much. The new crop is due in August.

SENNA.—The s.s. Ameer has brought 147 bales Tinevelly leaves from Colombo.

SHELLAC.—Early in the week a small business in TN orange for February delivery at 98s. 6d. per cwt. took place. Privately, 110s. per cwt. has been paid for *Fine orange* octagon B, 96s. to 97s. for good Second orange, and 112s. 6d.

per cwt. for Second button. At auction 374 cases were offered, but not one single package was sold—an occurrence almost unprecedented in the trade. Holders demand very high prices, and buyers were unwilling to go beyond the rates paid privately. The market closes strong: TN, March. 100s. Spot sales of first button at 125s., AC garnet at 88s. cash, and red TN at 96s. 6d. per cwt.

STAR ANISE.—The last business reported privately was at the rate of 85s. per cwt. for good genuine China.

Tonquin-beans.—Reports from New York assert that prices are lower for Angostura beans, of which heavy supplies have arrived. As it is uncertain whether there will be any further imports or not, buyers do not care to operate, though they would be willing to pay the parity of 6s. 9d., c.i.f. terms, for genuine frosted beans if they were assured that there would be no further imports for some time. Pará beans are all in second-hands, and firmly held at 1s. 9d., c.i.f., for black mixed; and 2s. 9d., c.i.f., for frosted Surinam.

Thursday's Market News.

42 CANNON STREET, E.C., February 16,

ACID (CARBOLIC).—The market is rather unsettled, and prices must be pronounced easier. Liquid 95 to 98 per cent. is quoted at 1s. 11d. per gallon; erystals are also offering at rather lower rates.

ACID (CITRIC) shows no improvement since last week. It is still possible to buy at 1s. $5\frac{1}{2}d$. per lb. in second-hand, but 1s. $5\frac{3}{4}d$. is mostly quoted.

ACID (TARTARIC).—A shade firmer. The German agents are no longer willing to sell at the low rates at which they were hawking the drug around last week. They have nothing below 11d. per 1b., c.i.f. terms, now, and have refused a bid of $10\frac{1}{4}d$. per 1b., c.i.f.

ALCOHOL.—German potato spirit keeps firm at $8\frac{1}{9}d$. per proof gallon, c.i.f. naked, for large contracts. Dextrine has again been advanced, and farina is much higher.

ALOES.—Cape aloes, which were in comparatively small supply to-day, sold at an advance of about 6d. per cwt.—53 boxes being all disposed of at 21s. to 21s. 6d. per cwt. for good bright hard, and from 21s. down to 18s. for slightly drossy to dull. It is said that the supplies will be small for some time to come. Of Curação aloes 151 boxes sold steadily at 55s. for good bright brown, 31s. for fair dark brown, partly capey, and from 17s. down to 8s. per cwt. for ordinary dark to very low overheated. Socotrine aloes in kegs slow of sale. At auction to-day 90s. per cwt. was asked for fair bright partly soft, and 75s. per cwt. for rather duller.

AMBERGRIS.—Still offering in great abundance. About 110 oz. were shown at the auctions to-day, but nothing could be sold. For fine grey pieces of good flavour from 95s. to 110s. per oz. is nominally required.

Annatto.—Seed is tending just a little lower—to-day holders accepted a bid of $2\frac{1}{2}d$. per 1b. for 64 bags good bright Ceylon seed.

ARECA.—Six bags from Penang sold to-day at 26s. 6d. per cwt., showing a somewhat easier tendency. Another lot was bought in at 30s. per cwt.

BLEACHING-POWDER.—Quotations have again been advanced by the manufacturers, who now require 8*l*. 5*s*. per ton f.o.b. Liverpool. The London price is 9*l*. to 9*l*. 5*s*. per ton.

Buchu.—A parcel of 13 bales, of which the arrival had been announced, was not landed in time for to-day's sales. Four bales good greenish, partly brownish, round leaves, brought from 11d. to 1s. per lb., a decline of 2d. to $2\frac{1}{2}d$. per lb. upon the previous sale rates. Another parcel of 4 bales good green, round leaves, was bought in at 1s. 2d. per lb., a bid of 1s. per lb. being refused.

CALUMBA.—In fairly good demand at rather irregular, but upon the whole steadier, prices. Of 137 bags 55 brought 29s. to 30s. for fair yellow sorts, and 17s. to 17s. 6d. per cwt. for dark brownish and wormy ditto.

CAMPHOR (REFINED).—The market shows some signs of disintegration, and although the makers' quotations have not changed, secondhand holders are offering more freely. German agents would accept 1s. $10\frac{1}{9}d$. per lb. net. At auction a bid of 1s. $9\frac{1}{9}d$. per lb. was refused for 3 cases flat Japonese cakes, for which 1s. 10d. per lb. is asked.

CANTHARIDES.—China flies are neglected, and lower prices would have to be accepted to lead to business. Seven cases of fair quality were bought in at 1s. 3d. per lb., and for a common parcel an offer of 10d, per lb. was rejected.

CANELLA ALBA.—For 8 bales good bright but broken quill of new import a bid of 34s. per ewt. was refused.

CANNABIS INDICA.—Very steady. Ten robbins fair greenish top sold to-day at 4d. per lb. A large parcel of stalky tops and dust was bought in,

CARDAMOMS.—The moderate quantity of 187 boxes of cardamoms was offered at to-day's auctions. With strong competition 127 of these sold at an advance ranging from 1d. to 2d. on medium grades to 4d., and even 5d., per lb. for fine qualities, which were scarce. Ceylon-Mysore—medium long yellow brought 1s. 7d.; small yellow long and round mixed, 1s. 4d. per lb. 'Ceylon-Malabar—fair medium-size pale, 2s. 2d. to 2s. 3d.; fair medium to bold yellow and brown mixed, 1s. 9d. to 1s. 10d.; good bright yellow round. 1s. 11d.; long and round mixed brown, 1s. 4d. to 1s. 5d.; small bright yellow, 1s. 3d. per lb. Seed, 1s. 6d. per lb.

Cascara Sagrada.—Held for more money. Twenty bags of good quality were shown to-day. The price asked is $37s.\ 6d.$

CASCARILLA.—Of 47 packages offered to-day 34 sold at slightly easier prices for ordinary qualities. There was a parcel of very fine selected silvery quill, for which 40s. per cwt. was paid; but common brown twigs only realised 19s. to 19s. 6d. per cwt.

Chlorate of Potash.—Prices keep exceedingly firm. In Liverpool sales have been made at 9d, to $9\frac{1}{2}d$, for delivery this month, while for March 9d, and for April $8\frac{3}{4}d$, per lb. is asked. There are many inquiries from the Continent and the States,

CINCHONA.—There was a rather poor assortment of South American barks, containing one nice parcel of very bold flat bright yellow bark of 24 packages, of which 13 sold at comparatively good prices; sound, 1s. 6d., and damaged, 1s. 5d. per lb.; 4 packages genuine Calisaya small flat orange brought 1s. 5d.; and of 73 packages spurious flat Calisaya, rather dark in colour and damaged, a considerable proportion sold at $6\frac{1}{2}d$. to $7\frac{3}{4}d$. per lb. Of 16 bales Maracaibo 8 sold at 5d. per lb. for damaged. One bale Equatorian red bark, about 100 lbs., medium to bold split quill, realised 7s. 9d.

CIVET.—The owners are still said to be unwilling to part with any below 10s. per oz., but for one horn (67 oz.) shown to-day the highest bid obtainable at auction was 7s. per oz.; this was refused.

COCA-LEAVES.—Of 10 bales good bright green, nice-flavoured Truxillo leaves, 2 brought 2s. 1d. per lb. There was another lot of very dark small leaves, but this remained unsold.

COLOCYNTH remains unaltered at low prices; 6 packages good bright pale rather seedy Turkey brought 10d. per lb.

CONDURANGO.—For 27 bales damaged broken quill from Havre 5d, per lb. is the price asked.

CUBEBS.—Very slow of sale, and only realisable at much lower rates. None were sold to-day. Of 51 bags from Singapore light and dark brown mixed berries, rather stalky, an offer of 72s. 6d. per cwt. was refused, and the parcel was bought in at 90s. For cubeb stalks no bid could be had at 25s., nor for siftings at 40s. per cwt.

DILL-SEED.—Holders show a disposition to accept lower prices to-day, and 106 bags were mostly sold at a decline of 6d. to 1s. per cwt.; fair East Indian realising 10s. 6d.

DRAGON'S-BLOOD.—For 4 cases rather dusty Socotrine drop 45s. was suggested as the price: this kind looks like going lower in price. Two cases hard finger in reed, medium colour, sold at 6l. 10s. per cwt.

Ergot of Rye.—Very little business has been done since the last auctions, but owners are holding for very high

prices, and appear to think that with any demand from the States the market is bound to advance. Fine bold Spanish ergot was bought in at the auctions at 2s. 10d. per lb., and good quality has since, we understand, sold privately at 2s. 1d. per lb. At auction 2 bags mixed German, very wormy, brought 1s. 6d. per lb.

GAMBOGE is from 2s. 6d. to 5s. lower in price. Of 25 cases 22 sold. Good bright partly broken pipe, slightly ricey mixed, at 11l. 17s. 6d. to 12l. 2s. 6d.; ditto in irregular pieces, partly blocky, 11l. 5s. to 11l. 7s. 6d.; fair. partly loose, partly cakey Saigon pipe, 11l.; ditto in lump and irregular pieces, 10l. 2s. 6d. to 10l. 5s.; ditto pickings, 9l. 15s. to 10l.

GLYCERINE.—A large business has been done in crude glycerine at rising prices, and the manufacturers of double-distilled have raised their quotations in sympathy with this rise by 3s. to 4s. per cwt., 48s. being now the general demand, though it is possible to buy below that figure from secondhand holders. But unfortunately most buyers have lost faith in this article, and are moreover well supplied by contracts. The rise in crude glycerine is chiefly ascribed to the alleged curtailment of the manufacture of stearine, and to the enormous rise in tallow.

GUM ACACIA.—Turkey sorts are steadily held, and although several parcels were shown to-day, none sold. A fine parcel of Cape gum of 31 bags realised very high prices, with excellent competition, 75s. being paid for good pale glassy drop; 51s. to 59s. for clean, pale siftings; and 44s. for brownish pickings.

GUM ASAFŒTIDA.—A newly-arrived parcel of 74 cases from Bombay sold to-day (mostly for export to the Continent and America) at 75s. to 85s. for half pinky and half grey block to partly loose to fine slightly softish pinky almonds in block, partly grey mixed, and 60s. to 72s. 6d. per cwt. for soft broken and loose grey block to pinky mixed ditto. There have been two other arrivals, which came just too late for inclusion in to-day's sales. One consists of 23 cases from Bombay, the other of 47 cases from the Persian Gulf.

GUM BENZOIN.—Fifty-seven boxes of Sumatra gum (the brokers said this was all they had) were well competed for, and 36 of them sold at an advance of about 5s. per cwt. Good bright seconds, almondy centres, slightly red borders, 6l. 17s. 6d.; fair centres, medium almonds, slightly red borders, 6l. 10s. to 6l. 12s. 6d.; ordinary ditto, 5l. 7s. 6d. to 5l. 10s. Fourteen cases Penang, good glassy, almondy centres, false packed tops and bottoms sold at 5l. 5s. and another lot not so good at 5l. 2s. 6d. Of 154 boxes Palembang gum only 21 sold at 40s. to 46s. for good almondy, and 19s. for common earthy.

GUM ELEMI.—Twenty cases good pale gum of fair flavour sold at 35s. per cwt. to-day, which shows a decline of about 5s. per cwt., as compared with the prices asked privately.

GUM GUAIACUM.—Two boxes broken and dusty, partly blocky, sold at 10d. per lb., a decline of about 2d. per lb.

GUM KINO.—For to-day's auctions a single case was catalogued, but not actually offered, the broker announcing that it had been sold before the auction at 14*l*. per cwt.

GUM MASTIC. — For nice pale drop 2s, 6d. per lb. is asked.

GUM MYRRH.—About 5s. lower in price. Of 100 packages offered to-day, 43 sold at 70s. to 72s. 6d. per cwt. for rather dark sorts, 44s. to 44s. 6d. for pickings, and 35s. per cwt. for dark siftings. Fine pale picked myrrh was bought in at 8l.

HONEY.—Jamaica selling fairly well, but there is no improvement in the price. Of 45 packages 27 sold at 30s. 6d. for dark liquid, and from 24s. to 27s. 6d. for brown to fairly pale candied.

IPECACUANHA.—The 94 bales of Brazilian root offered to-day were all of very ordinary quality; 32 of them sold at a decline of 1d. to 2d. per lb., most pronounced on the lower grades. Good sound annulated brought 7s. 6d., and very common thin and wiry to fair stout mixed from 6s. 8d. to 7s. 3d. per lb.; damages realised from 6s. 9d. to 7s. 3d. Of Carthagena root 25 bags were offered, and the holder succeeded in placing 10 at an advance of 1d. to 2d. per lb.; 4s. 6d. to 4s. 9d. being paid for good slightly damaged, while for fine picked a bid of 5s. 6d. per lb. was refused. Since the auctions good stout slightly damaged root has sold at 5s. 1d.

JALAP is arriving freely, and prices are tending much lower. At auction to-day 52 packages were offered, of which, however, only 18 sold at a decline of 2d. to 3d. per lb.; damaged small to bold mixed partly split, Tampico character, at 1s. to 1s. 3d. per lb. Another parcel was bought in at from 1s. 4d. to 1s. 9d., according to quality. Part of the arrival, which was not shown, however, consists of 10 bales fine picked Vera Cruz, and for this we hear that an offer of 1s. 8d. has been refused.

Kola.—In steady demand at firm prices, good bright dried West Indian selling at 8d. per lb.

LEMON-PEEL.—A parcel of 7 cases returned from Adelaide, described as bright English lemon-peel, each case of ten. 10-lb. tins was offered without reserve. It is said that it cost the owner 1s. 3d. per lb., but to-day it was not possible to obtain a bid of 1d. per lb. for it.

Musk.—Fine first-pile *Tonquin* pods are not in strong demand. Of 15 tins offered to-day only one sold at 56s, per oz. for old-fashioned small to bold pods, rather damp. Fine blue-skin pods were bought in at 80s. per oz. Third-pile pods sold at high prices, 5 out of 8 caddies being disposed of at 50s. 6d. to 51s. 6d. per oz. for blue skin and underskin, well-trimmed, slightly damp, and at 31s. 6d. to 32s. 6d. per oz. for small to medium untrimmed skinny pods.

OIL (CASTOR).—In demand at an advance of about $\frac{1}{4}d$. upon East Indian oil. Of 235 cases Calcutta (partly without reserve) 165 sold at 3d. to $3\frac{1}{4}d$. for good pale firsts, and at $2\frac{1}{8}d$. to $2\frac{15}{16}d$. for ditto packed in "rusty tins." French oil is also higher, Marseilles quoting 22s. 9d. to 23s. per cwt., f.o.b., for first, and 1s. less for second, pressing.

OIL (COD-LIVER).—Fine new season's Lofoden oil is being offered at 70s. per barrel landed, or 67s. c.i.f. terms.

OIL (EUCALYPTUS).—A parcel of 12 cases Australian sold at a reduction of about 50 per cent, upon the last nominal rates—viz., 5 cases pale oil from Melbourne at $11\frac{1}{2}d$., subject to approval, and 7 cases yellow oil from Sydney at 1s. per lb. Other parcels were bought in at nominal rates.

OILS (ESSENTIAL).—American Peppermint oil is dearer, and for HGH brand 12s. 3d. to 12s. 6d. per lb. is mentioned as the price. Japanese oil has been dealt in on the spot at 7s. 9d. per lb., and for delivery near at hand (with a guarantee of about 40 per cent. of menthol), at 8s. per lb., c.i.f. terms. Higher prices are now asked on the spot. The position of Menthol is not quite so strong. Spot sales have been made privately at 10s. 9d. per lb., and at to-day's auctions 10s. 3d. per lb. was accepted for a case, but it is doubtful whether holders would continue to sell at that figure. For delivery, however, the market is unsettled, and there are lower offers from Germany. Cassia oil on the spot sells at 3s. 2d. to 3s. 3d. per lb. For a parcel of East Indian rose oil a bid of 8d. per oz. was refused to-day. Cinnamon oil is firmly held, and fine qualities are very scarce. Fair oil was bought in to-day, at 1s. 3d. per oz. Several parcels of Nutmey oil were offered to-day, but none sold. For good white oil from Penang. 3\frac{1}{4}d. per oz. is asked. Ten bottles of a good brand of Ylang-ylang were bought in at 14s. per oz.; and 12 bottles of German oil of Claves at 2s. 9d. per lb. A parcel of 10 tons Citronella oil in iron drums, shipment up to the end of May, has been sold recently at 10\frac{3}{4}d. per lb., c.i.f. Liverpool. On the spot the price for usual quality native brands is \frac{13}{16}d. per oz. Lemongrass oil on the spot is held for 1\frac{3}{4}d. per oz.

ORANGE-PEEL brought irregular prices, though on the whole it is again rather easier. There is a plentiful supply, and about 23 cases sold at 1s. for very fine bright Malta, thin cut, 7d. to 9_3d . for fair to good ditto, and 5d. to $5\frac{1}{2}d$. for ordinary pithy.

PAREIRA BRAVA.—Good pale genuine root is held for 35s per cwt.; 6 bales thin sold without reserve at 17s. 6d.—they must have cost the original holder quite 100s.

QUININE.—At to-day's auctions a small lot of 500 oz. old stock Brunswick brand sold at $8\frac{2}{6}d$. per oz.

RHUBARB.—Rather dull of sale, with the exception of Shensi, which sold fairly well. Of 140 packages, 51 found buyers as follows: *Shensi*, medium to bold fair, three-fourths

pinky, one-fourth dark and spongy, flat, 2s. 10d.; small round druggists' root, pinky grey fracture, 2s. 2d. to 2s. 5d.: medium fair coat, good pinky fracture, round. 2s. to 2s. 1d.; ditto rough and partly dark fraeture, 1s. 4d.; ordinary partly dark druggists' root. 1s. 8d.; bold, half pinky, half dark, partly rough coat, 1s. 9d.; small partly fair eoated, even pinky fracture, round and flat mixed, 1s. 3d.; good pickings round and flat mixed, 1s. 2d. per 1b. Canton, medium to bold fair coat, 1s. 4d.; dark fraeture round, 1s. 2d.; small to medium, dull coat, flat and round mixed, mostly dull fracture, 11d. per 1b. High-dried, flat. medium to bold, fair coat, mostly pinky fracture. 1s. 2½d.; very dull coat, flat, wormy, and without colour, 10½d. per 1b.

SARSAPARILLA.—For sound *Grey Jamaiea* root not less than 1s, 7d. per lb. is acceptable; damages sell at 1s. 6d. per lb. Five bales damaged *Guayaquil* brought 11½d., and 2 bales dull *Native red* 11d. per lb. Ordinary *Mexican* root was bought in at 5d. per lb.

SENNA.—Of *Tianevelly* senna 280 bales, nearly all of the commonest description were offered and sold at slightly easier prices. Ordinary to medium greenish, but specky leaf, at 3d. to $3\frac{1}{2}d$.; dull to very low at $2\frac{3}{4}d$. down to 1d. per lb. Alexandrian leaves neglected; 8d. to 10d. per lb. is asked for fair to good greenish, 3d. per lb. for siftings, and 11d. per lb. for good pale pods.

SQUILLS.—Fair dry Malta sold at 4d. per lb. to-day.

TAMARINDS.—Rather higher prices are asked for good West Indian. At the auctions 50 barrels Barbadoes were reported sold privately.

Tonquin Beans.—Still firmly held. Five cases good black Pará were bought in at 3s. 3d. per lb. to-day. For good Angostura beans 6s. 6d. per lb., c.i.f., is now asked.

VANILLA.—A good supply sold, with lively competition. at 2s. to 3s. per lb. advance: good $6\frac{1}{2}$ to $8\frac{1}{2}$ inch, 17s. to 22s. 6d.; fresh choeolate, $5\frac{1}{2}$ to 8 inch, 10s. 6d to 17s.; good to fine, slightly crystallised, 4 to $6\frac{1}{2}$ inch, 14s. 6d. to 16s. 6d.; dull brown, 7s. 6d. to 11s. 6d. per lb.

WAX (BEES').—Cape wax sold well to-day at 61. 17s. 6d. to 71. 5s. per cwt. for fair to good orange; 10 bags bright Spanish brought 61. 7s. 6d. per cwt., and for dark grey to fair red Jamaica 71. to 71. 7s. 6d. per cwt. was paid. Good white bleached East Indian sold at 71. 5s. per cwt.

THE LIVERPOOL MARKET.

CHILLIES.—Last week's prices have been slightly shaded, and 40s. per ewt. was accepted for one big line of Sierra Leone; but holders have become firmer since, 42s. 6d. per cwt. being again the value of bright reds.

GUM ACACIA.—Only small sales of Soudan sorts have been effected, but prices are, if anything, a trifle higher, and holders are very firm.

OIL (CASTOR).—The market has steadily advanced during the week, and $2\frac{n}{16}d$. is now the price of good seconds Calcutta. Higher prices are looked for, and large parcels have changed hands.

THE SMYRNA OPIUM MARKET.

(Telegram from our Correspondent.)

SMYRNA, Wednesday night.

The rise in opium continues. It amounts to 10d. per lb. since last Wednesday. This week 150 cases have changed hands, principally for shipment to the American factories. For fair talequale opium (which a week ago could still be bought at 8s. per lb.) the equivalent of 8s. 10d. per lb., f.o.b. Smyrna, has been paid to-day,

THE AMSTERDAM CINCHONA SALES.

(Telegram from our Correspondent.)

AMSTERDAM, Thursday Afternoon.

AT to-day's cinchona auctions 3,045 packages of bark sold at a slight but all-round decline, the average unit being 5\\$ cents, or as nearly as possible 1d. per lb. Manufacturing bark in quill, chips, and ground, brought from 8 to 55 cents

 $(=1\frac{1}{2}d.$ to 10d. per lb.); ditto root, from 15 to 42 cents $(=2\frac{1}{2}d.$ to $7\frac{1}{2}d.$ per lb.); druggists' bark in entire and broken quill, from 12 to 45 cents $(=3\frac{1}{4}d.$ to 8d. per lb.); ditto in root, from 9 to 14 cents $(=1\frac{1}{2}d.$ to $2\frac{1}{4}d.$ per lb.). The principal buyers were the Brunswick, the Mannheim, and the Auerbach Quinine Works.

THE NEW YORK MARKETS

(From our Special Correspondent.)

NEW YORK, February 8.

THE most interesting feature of the drug market during the past week has been the great decline in alcohol. The doings of the Alcohol Trust on the Stock Exchange, in eonjunction with the rapid advance in the price of their product, has raised such a strong criticism and protest that the Trust has receded from the high prices to which it had raised spirit. It is also reported on Wall Street that this reduction in the price was made with a view to realising on stock in hand, so as to raise money to conduct the Trust's stock-jobbing operations. Whatever may have been the cause of the reduction, the drug-trade feels vastly relieved.

Epsom salts have advanced, \$1.10 being now the quotation for car-load lots. Guarana is in light demand only, and is moderately firm at \$1.05 to \$1.10 in a jobbing way. Two new manufacturers have entered the field with brands of domestic Sugar of milk, with the result of knocking the price down to 15c. and 16e., and with prospects of a pretty lively fight. Balsam copaida is quiet and neglected. Balsam fir (Canada) is very scarce, and holders are firm at \$2.75. There is practically no demand at the moment. Balsam Peru is held at \$1.10 to \$1.20 in a jobbing way, though round lots may be had at \$1.05. There has been some export business to Europe, and there is still eonsiderable inquiry. Some 15 tons of Caseara sagrada came to hand during the week, but nearly all of it had been previously placed, and the receipt has had no material effect upon the market, which is about 7 to $7\frac{1}{2}$ as to quantity. Tonquin beans (Angostura) are dull and weak, though it is reported that efforts are being made to concentrate the stock. Vanilla beans (Mexican) are very firm, and in light supply. There have been sales of HGH Oil of peppermint to the extent of a couple of hundred cases at about $\$2.52\frac{1}{2}$. The entire line of peppermint oils is much firmer in consequence of these sales, of the increased inquiry from abroad, and of the favourable cables received from London. Case oil now rules firm at \$2.60. The general line of bulk oils has also improved, though not in proportion to the improvement in HGH. Jaborandi leaves are in light supply, and very firm at 26c. to 28e. Gum ehicle is firm at 45c. to 47c. A round lot of Jalap has been sold at first hand at 26c., and 26e. to 28c. may be quoted as the price in lots. Mexican sarsaparilla has come to hand quite freely during the last week, but prices are very well maintained at 8e. to 9c. As is usual with Mexican products, there are the most conflicting rumours as to the condition of stock at the source of supply, some stating that supplies are ample, others that they are practically nil. Senega is giving way under some pressure to sell on the part of holders, and small lots have been forced on the market, causing a decline of about $52\frac{1}{2}$ c. The lack of interest in the article by European buyers is the cause of the weakness. Golden seal is firmer in the country, but prices on the spot remain steady at 21c. to 22c. Balsam Peru is in rather better shape, sales of ten cases for export are reported at about \$1, while holders are now a little stiffer. Cottonseed oil has advanced rapidly during the past week, and the indications are for still higher figures. The marked shortage in hogs, and consequently in lard and lard oil, has brought cottonseed oil to the front very noticeably. In addition to this is the fact, that the mills throughout the South report difficulty in securing supplies of seed.

(Cablegram from our Correspondent.)

NEW YORK, Wednesday night.

The price of Senega-root has advanced to 55c. per lb. for good bright quality in the producing districts. As yet the quotations in New York have not responded to this rise, but holders will probably follow suit shortly. American Oul of perpermint also shows a further advance, the price having now risen to \$2.65 per lb. for the Hotchkiss brand. Angostura Tonquin beans have risen to \$1.85 per lb. for good bold frosted.



Memoranda for Correspondents.

In letters for publication correspondents are requested to express their views a concisely as possible.

Correspondents should write on one side of the paper only, and devote a separate piece of paper to each subject of inquiry.

The name and address of the writer should accompany all communications with, if desired, a distinctive nom-de-plume.

Pharmacopæia Standards.

SIR,—We have read with interest your article on the Pharmacopæia standard, and endorse your remarks. We have been trying for years to get the standard for cream of tartar raised to 99-100 per eent., as it is in Germany, United States, and Japan. At present anything from 90 per eent. up is allowed, and one may have to compete with an article which intrinsically is of 5 to 10 per eent. less value to the consumer. When an article can be made commercially pure, surely it is to everyone's interest to have the standard raised, so long as the advance in price is only pro ratâ to the increased strength. Yours truly,

MIDDLETON, KIRKPATRICK & BARR. 4 Cullum Street, E.C., February 10.

The Railway Rates.

SIR.—In January last we sent 6 gallons vegetable naphtha from here to Highbridge, in a tiu, per Midland Railway. Shortly afterwards one of the railway officials ealled, and said that the minimum eharge being for 1 ton, 16s. earriage would have to be paid on this eonsignment. He pointed out that had it been put in hermetically-scaled tins, packed in sawdust in eases, it could have gone for 5s.

Formerly it would have cost the buyer about 1s. 2d.

Formerly it would have cost the buyer about 1s. 2d. carriage in an ordinary 6-gallon tin, merely protected by a basket

We protest against the absurdity of regarding vegetable naphtha, methylated spirit, and rectified spirit of wine as if they were as dangerous as mineral naphtha; but the railway company seem unable to understand the difference, and have them all down together, under Class A, for inflammable liquids.

Yours truly,

23 and 24 Redeliff Street, Bristol, A. & J. WARKEN. February 10.

The Medicine-stamp Act and Pharmacopæia Preparations.

SIR,—It may interest many of your readers to know that the authorities at Somerset House have inflicted a penalty upon me for selling a bottle of compound liquoriee-powder unstamped because in a price-list I issue, under the head of "Household Medical Hints." I recommend it for piles and worms. Following this, I cannot see what article is exempt, for almost every pharmaceutical preparation is recommended for something, and even a modest pennyworth of rhubarb pills must bear a $1\frac{1}{2}d$, duty. Is it not time that the trade combined to get this obnoxious Act repealed? No other trade would submit to these proceedings for a week. I send you a price-list. Faithfully yours,

send you a price-list. Faithfully yours,
280 Fulham Road, S.W.,
February 14. Faithfully yours,
E. A. TURNER.

[We quite agree with this correspondent. The Medicinc-stamp Act is so expressed that the Board of Inland Revenue can, whenever they like, make a chemist pay a penalty every time he sells any Pharmacopæia preparation, because any medicine is liable if it has been at any time recommended (by anybody) as a remedy for the relief of any human complaint. In this case Mr. Turner has printed in a price-list a series of short paragraphs on disorders. At the end of the paragraph on "Piles" he says, "The sufferer to have as much rest as possible. Mild aperient medicines, compound liquorice-powder, lenitive electrary, rhuharb pills, or acid

tonies with nux vomica are very good." Chemists should combine to get a guarantee from the Board that Pharma-eopeia preparations should not be iu any case regarded as liable to duty. The elaim is so reasonable that it could hardly be refused.]

"Intermittent Vitality."

SIR,—The letter under above heading which appeared in your last issue, signed "Fairplay," is calculated to create a wrong impression in the minds of those not conversant with the present position of the Newcastle-on-Tyne Chemists' Assistants' and Apprentices' Association. "Fairplay" evidently does not belong to either the North of England Pharmaceutical Association or the Assistants' Association, or he would know the reason why no syllabus has been issued and no meetings held. "Nobody," he says, "appears to have heard of its existence this winter"! Does he ever read his CHEMIST AND DRUGGIST? If I mistake not, there was published in your columns in October or November of last year a list of gentlemen who were willing to give contribu-tions during the current session. For the reason why that is the only visible sign of its existence I must refer "Fairplay" to the hon, secretary of the Association and would suggest that that gentleman produce the correspondence which has recently passed between the executives of the senior and the junior Associations in order that the facts may be put before "Fairplay" and others interested.

Although not now able to take any active part in the management of the junior Association, I still take a keen interest in its affairs, and cannot allow to pass unchallenged "Fairplay's" insinuation that it is through the supineness of the juniors that no meetings have been held this winter. A letter from the hon, secretary would prove interesting reading, and would show clearly on whose shoulders the blame rests; and in his bands I now leave the matter.

and in his hands I now leave the matter.

Yours truly,

GEORGE F. MERSON,

89 Shields Road, Newcastle-on-Tyne, President. February 13.

Tapeworm-remedies.

SIR,—Probably a few words in reference to the remedy published in The Chemist's and Druggist's Diary for the eure of tapeworm would not be out of place. On several oceasions I had given the following, which is a recipe of the gentleman to whom I was apprenticed:—

Nocte su	Puly, scammon, comend.	mp.	••		••	gr. xv
	Ol. filicis-maris					5i.
	Mucilaginis					383.
	Aq. menth, ad.,	••		••	••	Zij.
M.				2		

Ft. haust. Cras mane.

Then the patient was told to take a dose of eastor oil two hours afterwards. Now, some time ago a friend of mine was troubled with tapeworm, and I tried the aeid. sulph. arom. remedy prescribed in the Diarr, and the faet of the matter is it had not the slightest effect. After this (in a week or so) I tried the male fern, and the worm came away three hours after he took the castor oil.

In every case those troubled were very fond of German sausage. Faithfully yours,

Sir Patriek Dun's Hospital, THOMAS LEMON.
Dublin, February 10.

The Scottish Drug Depôt and its Managers.

SIR,—Under the above heading in your issue of last week a letter appears from Mr. Corstorphine, Chairman of the Company, in which he says, "It was Mr. Dawson who himself issued the eards in question, without any objection on his part." I make no criticism of the seutence (though it might stand a little), but if he intends the word "issued" to mean that I ordered the eards, or had any knowledge of the phraseology, or any part in the getting-up of them, his statement is not true. On the other hand, if he means it to imply that I delivered out the cards to the different shop s,them I

would hand the honour to the vanman and his horse; probably the horse might raise the least objection. Or suppose that I relieve the horse of his honour and take it myself. When I permitted the distribution of the cards to the shops, I was only carrying out an order from my directors. On inquiring of the printers, Messrs. Smith & Ritchie, Edinburgh, I find that the cards were ordered by Mr. Corstorphine personally, and a proof submitted to him in the usual manner.

My reasons for resigning were not in connection with the card-checking system; they were other reasons, which are not necessary for this letter. The correct number of gentlemen who have left the Scottish Drug Depôt at this time is five, and they were filling the most important positions.

Yours faithfully,

Edinburgh, February 15.

A. F. DAWSON.

DISPENSING NOTES.

Correspondents should consult "The Art of Dispensing" in regard to dispensing difficulties. Difficulties not explained therein may be sent to the Editor, who invites a general expression of opinion upon the undermentioned topics.

222/33. Antipyrin.—"Vap. Benzoin. c. Chlororof. mj."—This means tinct. benzoin. co. with a minim of chloroform to each drachm.

Gargle.

SIR,—What is the best mode of preparing this?—

SIGNA. (238/27.)

[Dissolve the acetate in 3 oz. of hot water, and the alum in a similar quantity. Mix the solutions, and filter, washing the filter with water to 6 oz. Then add the orange-flower water.]

Wrapping Hygroscopic Powders.

SIR,—The compiler of "The Art of Dispensing," in his article on powders, says that in dispensing hygroscopic substances in powders each dose should be wrapped in waxed paper, and that covered by ordinary white paper. He adds, "Do not attempt the reverse way." Now, a local teacher advocates quite the reverse way, and I have been told by a qualified man that in dispensing such powder at the Minor in Edinburgh he proceeded as the said tutor had told him, and his mode was passed—or, at least, not objected to or found fault with—by the examiners. How this should be that pharmacists in London and Edinburgh hold different opinions on such a question I should like to hear explained.

Yours faithfully,
Edinburgh, February 10.

Neirro. (237/35.)

MISCELLANEOUS INQUIRIES.

The Editor replies to queries of general interest, in the order in which they are received. Replies are inserted according to the space available. Postal answers cannot be supplied.

Back numbers, containing formulæ, educational or other specific information can be obtained from the Publisher.

232/58. Medicus.—We must refer you to our last Educational Number, September 17, 1892, for all information regarding the medical curriculum.

. 229.72. Falcon.—Graph-formula.—THE CHEMIST AND DRUGGIST, February 13, 1892, page 249.

221/29. Aqua Fortis.—Lecture on Water.—In the series of notes on "Lectures by Pharmacists," beginning The Chemist and Druggist. February 22, 1890, you will find all that you require for a popular lecture. There is a little 1s. book by Professor Attfield on water.

229/66. Cornish Chemist.—As aqua laurocerasi contains only 0·1 per cent. of HCN, it follows that a pint of it is equal to an ounce of dilute hydrocyanic acid. In place of the 16 oz. of the water use 5vj. nexxiv. of the dilute acid for your cough-mixture.

228/55. D.J. D.—Petroleum cannot be entirely deodorised by chemical treatment.

231/30. J. P.—The Saccharine Deposit in the Parrish's Syrup is grape sugar. It is best prevented by reducing the quantity of sugar, and using as little heat as possible in making the syrup. Heat should not be used at all in presence of the acid.

231/54. A. S. W.—Composition-powder.—November 26, 1892, page 788.

261/49. G. D. Comp.—You must add either spirit or salicylic acid to the mixture. In the latter case heat all the ingredients except the tincture to the boiling-point, and while hot add the tincture, to which 8 grs. of salicylic acid has been added. The keeping will then depend upon your cleanliness.

231'35. American Syrup.—You will find a formula for a Digestive Syrup in The CHEMIST AND DRUGGIST, October 15, 1892, page 597.

228/40. C. T. C.—If you want a work of reference for manufacturing purposes, Thorpe's "Dictionary of Chemistry" is about the best you can have. It is published at 6l. 6s. (3 vols.), and only two volumes have been issued. An old copy of Ure's "Dictionary," its predecessor, might suit your purpose.

227/23. Inquirer (Ballymena).—Black Cohosh-root is cimicifuga B.P.

227/30. H. T. W.—Better see a doctor, or try some of your own "far-famed liver-pills."

227/35. Ol. Morrhuæ.—Zinc-white made into a paste with suct is the best Theatrical Whiting.

227/29. Strad.—Violin-varnish.—The Chemist and Druggist, January 10, 1891, page 63.

230/54. Sarsaparilla.—The inconvenience you complain of is doubtless vexatious, but it is not a subject for public comment. The three firms you write about are all dependable, and if they say they are "out of stock" of particular articles we should be disposed to believe them. We note your intimation, however, that you are wiser in the north than we are in the south, and we will not press our opinion on you.

231/71. Acne.—We must decline to prescribe.

229/71. Galen.—You cannot get the L.D.S. anywhere now sine curriculo. How to get, refer to our last Educational Number, September 19, 1892.

225/26. New Zealand.—(1) Cement for China.—Steep 1 oz. of Russian isinglass in 6 drachms of water and 1 drachm

Mix.

of glyeerine over night, and in the morning heat the mixture on a water-bath, adding 9 drachms of glacial acetic acid. When dissolved pour the solution into suitable phials. (2) Sheep-dipping Powder :--

White arsenic			 	 1 lb.
Sulphur			 	 12 oz.
Dried carbonate	of	soda	 	 12 "
Soap-powder			 	 1 lb.

This is sufficient for 40 gallons of water, with which the powder is to be boiled. (3) Vermin-killer.—Mix 1 part of sulphate of stryclinine with 3 parts of wheat-flour, and colour with a little Prussian blue.

222 63. J. (Florence).—We do not know the cream which you mention. Is the brown one given in our issue of February 4 at all like it?

221/8. Bruce.—Ointment for Barber's Itch.—During the inflammatory stage the following should be applied:-

Ichthyol			••,	 	gr. xx.
Salicylic acid				 	gr. x.
Oleate of merci	ıry (10 per e	cent.)	 	3ij.
Oil of lavender				 	ntiij.
Lanoline				 	- 3vj.

Mix.

This to be kept constantly applied to the affected parts.

231/38. Eucalypt.—(Melbourne) wishes to destroy cats, foxes, rabbits, &c., by burning cones in their burrows so that the fumes will poison them. Better try a sulphur candle or two first.

232/2. New Subscriber (Sheffield).—Common Red Varnish for chair legs, &c.:-

Shellac	 	 	 1 oz.
Common resin	 	 	 2 ,,
Sandarae	 	 	 1 ,,
Dragon's-blood	 	 	 1 ,,
Spirit	 	 	 1 pint

Macerate for a few days, with occasional shaking, and strain.

If this is not cheap enough for you, you must omit the shellac and replace with gum thus.

232/1. Chemicus.—Oxide of cobalt is the colour used for producing blue glazes on bricks. The glazing material is a mixture of borax, silica, caustic soda, and some other materials, which vary with the districts in which the bricks are manufactured.

72/93. Xeres.—Hard Negative-varnish.—One of the best varnishes is made from benzoin. Select the best white parts, preferably Siam benzoin, powder roughly and macerate 1 part in 10 parts of spirit until most of it is dissolved; then filter. The resulting varnish is exceedingly durable.

234/20. Borax.-Wc should think that a liberal application of solution of ammonia would remove the grease from the waterproof.

234/35. Subscriber (Bradford).—Liebig's Beef Wine. —See C. & D., January 2, 1892, page 31.

234/18. F. W.—Use a little more metasulphite for the developer. We expect that your ordinary sulphite is not up to the mark.

237/23. T. B. F.—See our last Educational Number.

238/36. Subscriber (Lancaster).—Please explain what you want.

INFORMATION SUPPLIED

Milk of Magnesia (inquired for recently) is a proprietary article, put up by the Phillips Pharmaceutic Company, Montreal, and is said to be a hydrated oxide of magnesium, four times the strength of ordinary fluid magnesia. It is, as its name implies, of milky appearance. Vancouver, B.C., January 7.

CHARLES NELSON.

Liq. Rosæ Dulc.—Glycerinum (231/55) writes: "This preparation is made by Ferris & Co., Bristol."

Honey Balsam. -- Oxymel scillæ is generally sold here as honey balsam or balsam of honey. MAX. (238/8.) Aldershot, February 13.

Indiarubber Goods .- Chemists often have these so long in stock that they get hard and unsaleable. To renovate warm them a little on a plate in the oven (not too hot), and rub them well with a little glycerine. Possibly this "tip" may be of use to your correspondent. Biz. (237/57.)

Essence of Coffee, 1d.—The inquirer who sought for this can obtain it from Messrs. T. & H. Smith & Co., who put it up as sample.

THE VOICE OF THE DRUGGIST-TOO HIGH.

Twas the voice of the druggist, I heard him complain-"My trade has all vanished; I seek it in vain." Yet to think he's in error no'er enters his head, And no lesson he learns, though he loses his bread.

A little more profit, a little more plunder— That his eustomers leave him no person can wonder. Things pretty and novel are left on his hands, And old-fashioned become e'er some greenhorn he "lands."

I paid him a visit, but found him as blind As a bat to his faults: said "the world was unkind"; Then prattled of "stores," talked of failing and sinking, Yet of ninepences nimble to turn ne'er was thinking.

Said I, "Then, my dear boy, here's a lesson for me: If my living I'd get, I must wide awake be, Nor think, because nearly a medical swell,

I must not act the part of a tradesman as well."—Moonshine.

Aext Week.

Meetings, &c., to be held, and business to be transacted thereat. Suitable notices will be inserted in this section if received by the Editor on or before Wednesday.

MONDAY. February 20.— Chemical Society, Burlington House, London, W. Extra meeting, at 8 p.m. "Kopp Memorial Lecture," by Professor T. E. Thorpe, F.R.S.

MONDAY, February 20.—Society of Arts, at 8 P.M. Professor J. A. Fleming on "The Practical Measurement of Alternating Electric Currents."

TUESDAY, February 21.—Royal Institution, at 3 p.m. Professor Victor Horsley on "The Functions of the Cerebellum."

Wednesday, February 22.—Edinburgh Chemists', Assistants', and Apprentices' Association. Lecture in Y.M.C.A. Hall, at 9 p.m., by Mr. J. Laidlaw Ewing, "A Glimpse of Italy," with lime-light views.

THURSDAY, February 23.—Royal Institution at 3 P.M. Professor Patrick Geddes on "The Factors of Organic Evolution.'

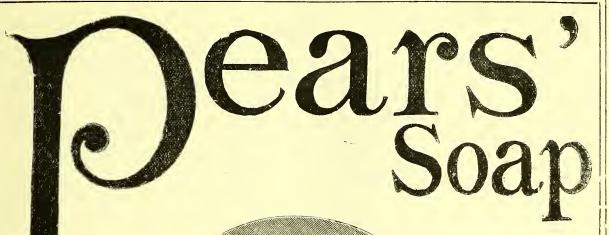
THURSDAY, February 23.—Chemists' Assistants' Association, 103 Great Russell Street, W.C., at 8 P. M. Paper: "Notes and Queries, Chemical and Pharmaceutical," by Mr. Campbell Stark.

THURSDAY, February 23.—Dundee Chemists' Assistants' Association, at 9.15. Mr. Wm. Mair on "Photography.

THURSDAY, February 23.—Liverpool Pharmaccutical Students' Association, University College, at 8.30. A paper by Mr. J. E. W. McFall, F.C.S.

FRIDAY, February 24.—Royal Institution, at 9 P.M. Dr. Edward Hopkinson on "Electrical Railways."

SATURDAY, February 25 .- Royal Institution, at 3 P.M. Lord Rayleigh on "Sound and Vibrations."





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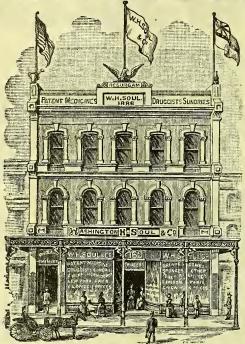
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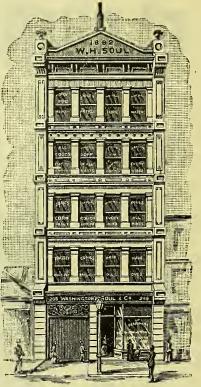
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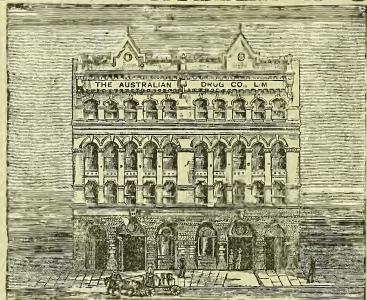
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Absolutely pure. The original preparation, invented and introduced to medicine by Mr. Schacht in 1855. Its distinct superiority is univer sally admitted. In ½ lb., 1 lb., 2 lb., and 5 lb. bottles. Dose: 1 drachm diluted. When ordering, please to specify "SCHACHT'S."

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Each drachm contains one grain of soluble Euonymin. Dose: One draohm. For dispensing \(\frac{1}{2} \) lb. and 1 lb. bottles.

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A perfect solution of Podophyllin, containing } gr. in each drachm.

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LION OINTMENT & PILLS.

DEACON v. BURGESS.

In the High Court of Justice, Chancery Division, on Saturday, December 17th, Mr. Justice Kekewich, in delivering judgment, said "that it will be sufficient, I think, and I am sure quite safe now to say that the plaintiff (Mr. H. J. Deacon), who certainly has not proved his knowledge of the genuineness, but who has clearly indicated his ignorance, and who is attempting to sell as genuine medicine that of which he is really ignorant." N.B.—A full report of the Judgment appeared in The Chemist and Druggist, December 24 last.

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The Trade is respectfully requested to refer to the issues of "The Chemist and Druggist" of December 16 and 17, and to read the Statutory Declaration made by E. Burgess, Junn., before the Lord Mayor of London. E. B., Junn., is the only person living with the knowledge of method of manufacture of these Remedies, and all statements to the contrary are untrue.

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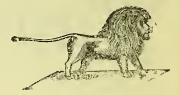
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Gingerin, gr. i).
Ft. pil. xij/8
533 Aloes Barb., gr. iss.
Jalapæ. gr. i.
Coloc., gr. i.
Cambogiæ, gr. }.
Saponis, gr. ss.
Ol. Carui, gtt. 1/5
40 ALOIN, Jalaoin.aa.gr.i.
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130 PlL. HYDRARG., gr. 1.
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Gingerin, gr. 1/10	
ERGOTIN.	
98 ERGOTIN.	
Ferri Sulph Exsic.,	Ш
Ext. Hellebor.,	u
Aloes Soc., aa. gr. i.	П
Ol, Sabinæ, gtt. ss 1/2	Ш
GOUT.	Ш
472 EXT. COLCHICI, gr. 2.	H
Ammor. Carb., gr. 2.	
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Special Prices for 500 or 1,000 Gross lots of Pearl or Ge	18
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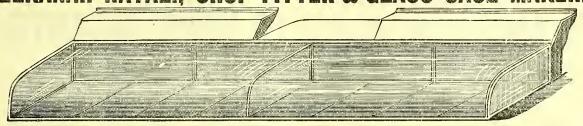
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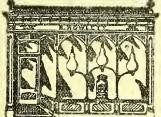
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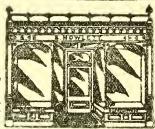
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FOR CHILDREN TEETHING,

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SURE TO REGULATE THE BOWELS.

Depend upon it, Mothers, it will give rest to yourselves, and

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Elocutionists
Will find the Vaporizer of very
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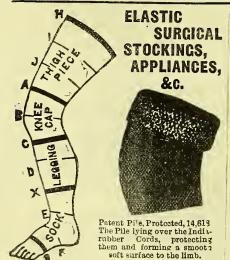
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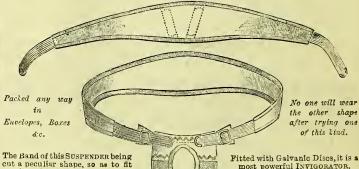
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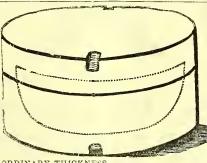
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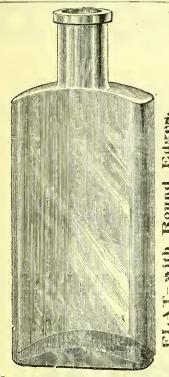
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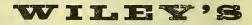
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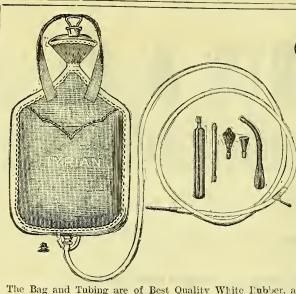
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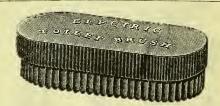
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